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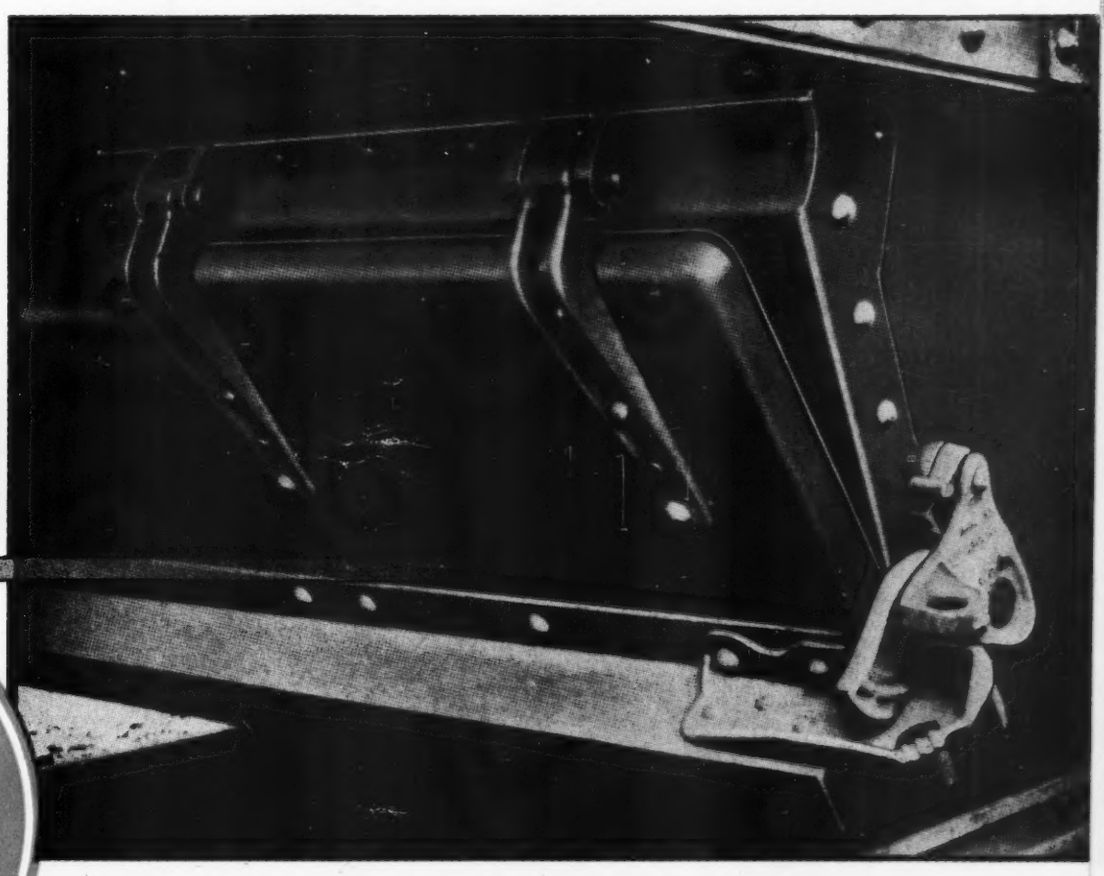

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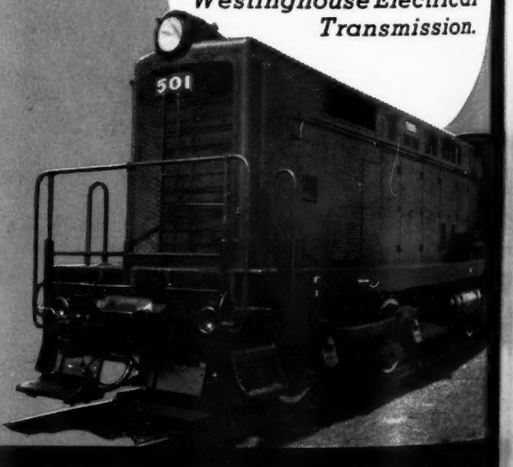

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Vol. 110 June 7, 1941 No. 23

Published every Saturday by the Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa., with editorial and executive offices: 30 Church Street, New York, N. Y., and 105 West Adams Street, Chicago, Ill.

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The Railway Age is a member of the Associated Business Papers (A. B. P.) and of the Audit Bureau of Circulations (A. B. C.)

Subscriptions, including 52 regular weekly issues, and special daily editions published from time to time in New York, or in places other than New York, payable in advance and postage free. United States, U. S. possessions and Canada: 1 year, $6.00; 2 years, $10.00; foreign countries, not including daily editions: 1 year, $8.00; 2 years, $14.00.

Single copies, 25 cents each.

H. E. McCandless, Circulation Manager, 30 Church St., New York, N. Y.

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The Railway Age is indexed by the Industrial Arts Index and also by the Engineering Index Service

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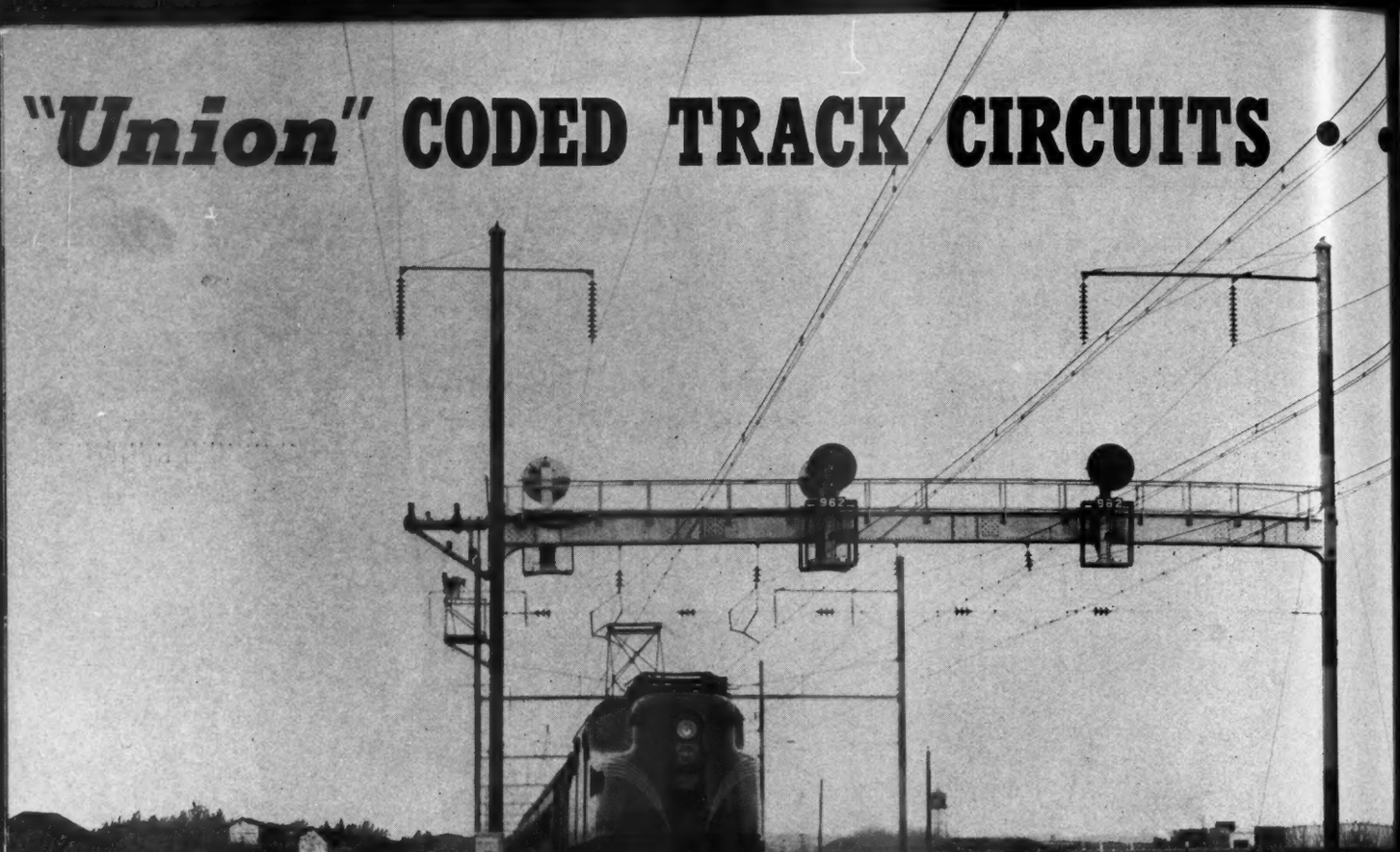

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The Car Situation—No Cause for Panic, Nor for Complacency

While there is no room for complacency and "business-as-usual" on the part of the railroads in respect to the tightening car supply, there is even less occasion for the panicky rumors of an impending "bottleneck" in railroad transportation being assiduously circulated by mischievous bureaucrats, who appear to be much more interested in socializing the American economy than they are in the effective defense of their country. Those who originate these baseless rumors and the sensationalists who spread them—without making any effort to test their veracity—are playing the game of the enemies of their country. Every railroad man and every shipper who hears one of these scare stories—of this or that shipment being held up for lack of cars—ought to nail it by asking the man who is spreading it to give the source of his information; and to tell **all** of the attendant circumstances.

For instance, we heard recently of a reported shortage of a highly specialized type of railroad car, designed for unusual lading. A shipper, it was said, wanted several of these cars and could get but one. Inquiry developed that the shipper actually needed one of these cars now, another at the middle of the summer, and another next fall. One of these cars, in short, would meet all of his requirements, and be able to handle other lading in the intervals between his shipments. Another similar report has to do with a government agency dealing in commodities, which was reported to be shy a couple of hundred cars for the movement of eggs. Inquiry developed that it was not cars which were short, but eggs. That is, the agency wished to buy 200 more carloads of eggs than it could conveniently assemble—and the Washington rumor factory converted this shortage of eggs into a car shortage.

Estimates of Traffic

A great deal has been made of an alleged failure by the railroads and of the transportation department of the National Defense Advisory Commission to forecast accurately at the beginning of the current year the volume of traffic which the carriers would be called on to move. Sensationalism with respect to this estimate has been given plausibility by the fact that the Defense Advisory Commission's estimate (a 9.4 per cent increase in carloadings in 1941 over 1940) was for the **entire year** 1941—not just for any one month or any one week. Those who have wished to create the impression that the nation's most competent transportation men were unequal to their responsibilities have done so by contrasting this 9.4 **annual** estimate with the **current** loadings which are now running 25 per cent or more above those of 1940.

In January this year carloadings were 7 per cent above those of 1940. In February the increase was 12 per cent; in March 22 per cent; in April 12 per cent (the moderating of the rate of increase being caused by the coal strike); and in May almost 24 per cent. If this rate of increase over last year were to keep increasing throughout the remainder of the year—obviously within a few months the roads would be called upon to handle a volume of traffic exceeding that of all previous history. It is not reasonable to expect this same **rate** of increase to continue, however—that is, for the increase over 1940 in the rest of 1941 to exceed the increase of 24 per cent reached in May.

Traffic Now on a "Plateau"?

As the *Railway Age* said in an editorial in its issue of May 10, page 790, "Some of the most important industries producing especially for defense already have approached or actually reached the limit of their present capacity; and apparently this will decelerate the increase of defense production, and consequently the increase of defense traffic, until the capacities of some industries can be increased." Primary among these is steel—which, unless and until its productive capacity is increased, will be a directly limiting factor on further increases in railroad loadings; and will be an indirect limitation on shipments of raw materials (notably ore and coal) and upon finished products, in which steel is a component. The production and shipment of finished products for the defense program may be expected to increase steadily—but from now on this increase will have to come more and more from a diminution of production and traffic for civilian use.

The estimate of the Defense Advisory Commission that the increase in carloadings in 1941 would aggregate 9.4 per cent for the entire year was based upon statistical studies undertaken before the end of 1940—prior to the enactment of the so-called "lend-lease" bill. That it was an accurate estimate insofar as the plans of the federal government then went, there can be no doubt. It is equally clear that this estimate does not include the further increases in the defense program

which have been made since the compilation of the earlier estimate—and a revision is now under way.

By the time the "peak" of traffic is reached in October, the railroads expect to have available 156,000 more serviceable freight cars than they had at the peak of traffic in 1939. With such an increase in cars, the carriers should (even with the car efficiency of 1939, which actually has been considerably increased since then) be able to handle a "peak" of traffic 96,000 cars in excess of the maximum actually handled at the "peak" in 1939. This means that the railroads would this fall, even by this conservative calculation, be able to move a "peak" load in excess of 950,000 cars, without any delay whatsoever. The railroads' own calculations at the present time point to a lesser "peak" than that—somewhere between 930 and 940 thousand cars.

Car Utilization Improved

Our own view of the situation is that it is safer to overestimate what requirements are going to be than to underestimate them and, accordingly, that an estimate of 1,000,000 carloadings a week as the fall peak would be a better one to aim at than a lesser figure. Even that total is not enough beyond a conservative estimate of the railroads' maximum capacity at the coming fall "peak" to cause any serious worries about the railroads becoming a "bottleneck" in the defense program. For example, the roads added an equivalent of 26,000 cars to their capacity in 1940, compared with 1939, by the expedient of increasing the average net load per car by almost one ton. Further improvement in car utilization is occurring and still further improvement is possible, through the co-operation of the carriers and shippers; and there is no foreseeable contingency of possible traffic demands—so far as 1941 is concerned—which such co-operation cannot surmount.

It is worthy of notice that no question can possibly arise as to the adequacy of railroad facilities for the handling of purely defense traffic. But more is expected of the railroads than that. They are looked to to provide, not only for the prompt movement of military supplies, but also to protect the large increase in civilian traffic brought about by larger employment and widespread wage increases. No other basic industry is expected thus to provide fully under present conditions for all possible demands from customers whose wants may have little to do with national defense—including those customers who, under normal conditions, and when the railroads really needed their business, elected to give their patronage to other agencies of transportation. The railroads are expected to keep "stand-by" facilities in readiness to meet all possible contingencies, and to protect the business of concerns which never gave a thought to the welfare or even to the survival of railroad transportation. And, despite the unreasonableness of such demands on the carriers, they are nevertheless preparing to meet them; and with very little question that they will be able to do so, with a minimum of congestion and delay.

The only "tight" situation in the immediate offing is that which is expected to arise with respect to this year's grain crop—but that will not be a "car shortage," even though political propagandists may seek to put that interpretation upon it. By late spring this year there were 40,000,000 bushels of government-owned grain carried over from last year in storage in the wheat-growing centers of the country. This storage capacity will be needed for this year's crop—but, so far, space for only 12,000,000 bushels of the 40,000,000 has been located in other sections. The railroads cannot offer for the storage of grain freight cars vitally needed for transportation; hence, they will not be able to accept shipments unless it is known that consignees will be able to take delivery. Any refusal of the railroads to accept grain shipments will not, therefore, be ascribable to a railroad "breakdown" or to a "shortage" of cars or other railroad facilities; and anyone who offers any criticism of the railroads in this connection will disclose himself as ignorant or maliciously intending to mislead.

With all that may truly be said about the degree of preparedness of the railroads to meet the demands that are likely to come their way during the balance of the year, though, there is still nothing about the situation to encourage complacency on the part of any railroad man or any shipper. There is no truth in the rumors of a "railroad breakdown," nor even of a "bottleneck." On the other hand, the margin of safety of railroad capacity above probable requirements is admittedly a narrow one, and everybody connected with the railroads or with the shipping or receipt of freight owes it to his country to do everything in his power to increase the efficiency with which the available supply of freight cars is used. This patriotic duty arises not only from the necessities of national defense, but also in defense of the American system of free enterprise.

Socialists Hoping for Trouble

It is a well-known fact that certain Washington bureaus are infested with socialists who are confidently hoping that something will happen to the railroads which they may plausibly—however falsely—label a "breakdown," and thus provide an excuse for government operation. These bureaucrats—products of recent governmental extravagance and so-called "social objectives"—are mostly either pedagogues, boys just fresh out of college, or failures in private enterprise. Their only hope of continuing themselves in power, and providing for their advancement after the present defense effort ends, is to have the federal government greatly enlarge its participation in economic activity so there will be jobs and power and promotion for the bureaucrats after the present emergency is over. These men have no scrupulous regard for traditional free institutions to mollify their urge to power; and private enterprise can trust them just as far as Poland could trust Hitler.

The best protection that private enterprise in trans-

portation can have against them is for everybody connected with transportation to do what he can to prevent "tight" situations from developing which these enemies of private enterprise can seize upon and "blow up" into a panic. Prompt loading and unloading of cars; loading them to capacity; moving them promptly—these are all things which both shippers and carriers can do to protect their country; and to keep their country free so that it will be worthy of the sacrifices we shall all have to make for its defense.

Specifically—to mention but one of many measures which railroads may adopt to achieve greater efficiency in the use of cars—more intensive supervision is needed in the provision of cars for industries. Especially where there is competition among several railroads, it is not unusual to find each carrier participating in such traffic supplying the shipper with cars in excess of his requirements—merely as a safeguard against possible loss of tonnage to a competitor. Such surplus cars afford no genuine service to the shipper; and, if any "tightness" should develop, the road providing excess cars to one shipper might find itself actually losing traffic at another point, to the disadvantage of everybody. These "tight" situations have not yet developed to any important extent—but now is the time to set up protective supervision and to get the habit established throughout every operating organization of looking on cars as the important units that they are.

Costs for Pricing vs. Formal Accounts

The February 1 issue of the Bulletin of the National Association of Cost Accountants contains a searching analysis by Harry E. Howell, of the proper function of cost accounting in business management and price control.

While the discussion relates primarily to the manufacturing business, fundamentally it is just as applicable to the transportation. Consider the following:

"There has been an enormous increase in the production of figures, but in many cases little progress in determining which facts are of vital significance in charting the profit and loss course of the company. . . .

"There is a 'delusive appearance of accuracy' about financial statements, chiefly because they balance and are expressed in figures. There is a compulsion about accounting conventions which leads one to mistake the shadow for the substance. . . .

"Another point of error in overhead distribution is the failure to distinguish between those costs which are a function of time and those which are a function of use. In other words, between standby costs, which are those that we have regardless of whether or not we produce, and variable costs which fluctuate directly and consistently with production.

"The management problem in controlling standby costs is distinct from that in controlling variable costs. Initial investment, capacity and size of standby organization affect, first, cost, so that volume or utilization is the prime factor. It is the fixed cost that varies with each added or reduced unit of production. But with the variable cost element the problem is one of methods, of efficiencies and of constant control because these costs are constant for each and every unit of production. Moreover, failure to distinguish between standby and variable costs produces erroneous costs due to improper assessment and distribution. . . .

"One of the last points in this group is probably the hardest for the accountant to understand. He has been trained to charge costs against the product on the basis of casual responsibility. In other words, if it was because of this particular product that the expense was incurred, or if it was this particular product that received the benefit of the service, then it should be charged to that product. There is no particular argument with this theory until we deny that it is possible to look at the matter in any other way. We must admit that many costs must be assigned to products in the determination of their selling price and in the determination of their relative contribution to the profits of the company, on the basis, for example, of what the traffic will bear. In other words, it might be excellent business—in fact, a matter of necessity—to let the product which for some reason or other can command a relatively high price carry more of the overhead than a product which has to meet severe competition.

"It is not wise to assume that a product that cannot carry its full share of the overhead should be discontinued unless we have made a most careful study of our standby charges and do not forget that these standby charges include the fixed cost of selling and administration. These fixed costs would include the compensation of the salesman, unless he is on straight commission. We may well find that while a given product may not produce very much net profit, its absorption of fixed costs which otherwise would have to be spread over other products—thereby reducing their gross—fully justifies its position in the line.

"All of these matters become very much clearer if the accountant will realize that there is no such thing as an all-inclusive conception of cost. We may want to determine a cost which expresses the entire economic outlay from the time the investment is first made until it is recovered; we may want to determine the cost for purposes of inventory valuation; or we may want to compute cost as one of the determinants of selling price at a time when our volume is below normal capacity. In the latter case, the figure needed would be entirely different from the cost which we would consider when we are already running above normal."

If it is a sound principle for business generally to distribute fixed costs for pricing purposes according to the ability of the commodity to absorb overhead, in order to obtain better utilization of plant facilities and greater net—then shouldn't regulatory authority encourage this practice in transportation instead of discouraging it?

It might be justifiable to prohibit a railroad from engaging in this practice, if its result would be to deprive the public of sufficient railroad service; or to prohibit a trucker from the practice if it would deprive the public of adequate truck service, but is it economically sound to encourage the present practice of holding high the price umbrella of one form of transportation, merely to permit another to exist, with little or no economic justification?

Congress has said by the Transportation Act of 1940 that the rates for each form of transportation should only consider the conditions *in that branch of the industry,* and not their effect upon any other form of transportation.

Left — Grading on Big Summit Cut, Where a Large Amount of Grading and Blasting Equipment Was Concentrated When "Full - Speed" Grading Operations Got Under Way After January 23. Below—The Big Piney River Bridge Under Construction. This Work Was Begun as Soon as the Crossing Was Located, in Advance of Adjacent Grading

Uncle Sam Builds a Railroad — Fast!

Constructs line 20 miles long to Fort Leonard Wood, Mo., in the heart of the Missouri Ozarks, in three months

ON the morning of November 14, 1940, at a crossing of two narrow forest trails in front of a little white church in Mark Twain National Forest in Missouri, a small party of railroad locating engineers gazed northward toward the Valley of the Big Piney river. One thought passed simultaneously through the minds of every man in the group—"Where do we go from here?" Six months later at that location, a modern city for 40,000 soldiers and officers had been created,—Fort Leonard Wood, training post for the 7th Corps Area, comprising the states of North Dakota, South Dakota, Minnesota, Nebraska, Iowa, Kansas, Missouri and Arkansas. This training post is connected to the outside world by a new railroad 19.84 miles long with 6.62 miles of passing tracks, warehouse tracks, etc., the major portion of which was completed within a period of three months at a cost of approximately $3,000,000. The completion of the railroad, through one of the roughest sections of the Ozark region of Missouri, requiring the movement of 1,900,000 cu. yd. of excavation, much of it rock, in a period of weeks, represents a great feat in modern construction.

The construction of the railroad presented a number of problems, the principal one being that the time limit set for completion was May 25. Other problems, such as the inaccessibility of the locality, the difficulty of obtaining a suitable railroad location in the rough country, heavy construction work involving a large amount of rock excavation, mud and the most unfavorable season of the year, difficulty in securing materials and a shortage of skilled labor, combined to make the completion of the project well within the time limit specified, a remarkable achievement.

The small party of engineers that stood in front of the church on the morning of November 14 had been engaged a few weeks before to locate a short connecting railroad and yard tracks at a location in flat open farming country near Leon, Iowa. Suddenly, because an adequate supply of water was lacking at that location, the War Department decided to transfer Fort Leonard Wood to the Mark Twain National Forest in the southern part of Pulaski county, Missouri. The site chosen consists of 95,000 acres of reservation and 12,000 acres of camp site, located at the north end of the reservation.

Topographically, the reservation is located on the north end of a ridge extending northerly from the principal

divide between the Missouri and the Arkansas rivers. The land on all sides of the camp site except on the south, breaks rapidly into gullies and hills, draining into the Big Piney river on the east and north, and into the Gasconade river on the west.

The site of the camp is 19 miles south of the main line of the St. Louis-San Francisco, the nearest railroad, and, before roads were built in connection with its construction, was five miles from the nearest good highway (U. S. No. 66). The nearest point on the Frisco is a siding named Arlington, 3½ miles west of Newburg, Mo. At Arlington, the Frisco main line is located in a valley between the Little Piney river and the bluffs along the north side of that river just east of the point where the railway crosses the Gasconade river. In this vicinity the Frisco has the heaviest grades and sharpest curvature on its main line. Because of these heavy grades and curvature and because a new line of light curvature and easy grades could be built through this locality only at an excessive cost, it was decided that the railroad to the camp site should have a maximum grade of 2¼ per cent, compensated for curvature at the rate of 0.04 per cent per degree, and a maximum curvature of eight degrees. It was also decided that the line should be built to standards comparable with the Frisco main line, with 110-lb. and 100-lb. rail, with spiral easements on curves sharper than 4 deg., with automatic block signals of the semaphore type and with the bridges designed for Coopers E-50 loading.

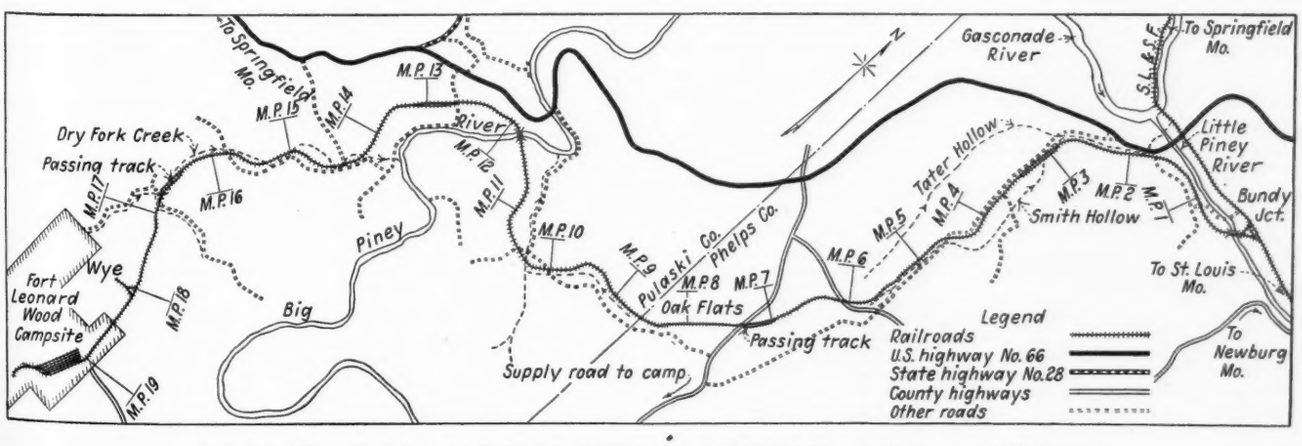
All of the construction of both Fort Leonard Wood and the railroad is under the jurisdiction of the War Department, with Major Frank Reed, Jr., Constructing Quartermaster in charge. All of the engineering, architectural design, layout and planning is being performed by the firm of Alvord, Burdick & Howson, architect-engineers, Chicago, with the aid of Col. Frank G. Jonah, chief engineer of the St. Louis-San Francisco, as consulting engineer for the railroad construction. These engineers also approve requisitions, inspect materials and check the progress of all of the work. All of the construction work is being done on a cost plus fixed fee basis by a single group of contractors named the K. N. W. L. Company, which was composed of the following firms: W. A. Klinger, Inc., Sioux City, Iowa; Arthur H. Neuman & Bros., Inc., Des Moines, Iowa; the Western Contracting Corporation, Sioux City; and the C. F. Lytle Company, Sioux City. The awarding of the contract on a cost plus fixed fee basis enabled a large amount of work to be sub-contracted on a rental basis for the equipment used. This was an important factor in speeding up the work, since it eliminated the necessity for accurate determination of quantities during the progress of the work. All that was required was an accurate check of time and of the equipment and materials used.

All of the Blasting Was Completed in a Period of Five Weeks, During Which 384,000 Lb. of Dynamite Were Used

Railroad Location A Difficult Problem

With both ends of the new railroad more or less definitely located and with the maximum grade and curvature determined, the problem of location ordinarily would be relatively simple, but such was not the case in this instance. At the starting point, the Frisco lies at an elevation of approximately 697 ft. above sea level. Between this point and the camp site are the Little Piney river, with an elevation of 672; a divide called the Oak Flats, with an elevation of approximately 1,075; Big Piney river, with an elevation of approximately 698; and Fort Leonard Wood, at an elevation of 1,118.

In addition to this large amount of rise and fall, the smaller streams lay in deep valleys, with steep hills on each side and their stream courses generally descend at grades of from 2½ to 3½ per cent, or considerably



Location Plan, Showing the Railroad, Campsite, and Principal Stream Courses and Highways

steeper than the grade allowed for the railroad. There was sufficient distance, however, to gain the desired change of elevation in each case, except between the Oak Flats and Big Piney river. In this sector the distance between the ridge and the river was too short for the minimum grade specified without a circuitous route or very heavy grading. No maps of any accuracy as regards topographical conditions in that area were available, except recently completed United States Geodetic Survey maps.

To begin with, the starting point of the line was moved 1½ miles east of Arlington, so that a wye could be constructed between the Frisco line and Little Piney river without constructing large bridges over the river on each leg of the wye. This starting point was named Bundy Junction. Beyond the wye, the line crosses Little Piney river and proceeds downstream along the south side of the valley to Smith Hollow and thence up Smith Hollow to the Oak Flats. This portion was relatively easily located. The right of way was condemned immediately and railroad construction was begun on December 5.

Between the Oak Flats and the site of the Fort, the location became more difficult, and in order to speed the work, additional engineers were hired. Approximately 50 miles of preliminary lines were run, most of them south of the present location. One attempt was made to develop a route for a high-level crossing of Big Piney river, but this was abandoned when it became evident that the cost of such a crossing would be very high.

Location Completed

In January the situation was getting serious because of the time limit set for the construction, and the difficulty of the topography. At this time six engineers from the engineering department of the Frisco were assigned to help on the location work. The present route of this portion of the line was then developed, starting down from the Oak Flats through a very heavy cut which is called Summit Cut. The line then follows the side hills along a dry gulch to Big Piney river. This location was completed about the middle of January, the right of way was condemned, and construction was begun on this section on January 23. The location of the remainder of the line following upstream alongside Big Piney river to Dry Fork Creek and then proceeding up Dry Fork Creek valley to the camp site, was completed the latter part of February.

The line as finally located has 68 cuts, 68 fills and 70 curves, of which 16 are 8 deg. curves. The total curvature amounts to approximately 2,354 deg. This line has 3 steel truss spans and 16 timber trestles. The total length of the steel spans is 468 ft. and of the timber trestles, including the approaches to the truss spans, is 3,681 ft. The line has four passing tracks, each 2,000 ft. long, a wye at each end of the line and nine tracks in the warehouse area at the camp. The total length of the passing tracks, wye tracks and tracks in the warehouse area at camp is 6.62 miles. As previously mentioned, the maximum grade is 2.25 per cent and the longest sustained grade is 6.17 miles in length.

Trouble with Poor Roads and Mud

When the location was started, the contractors for the camp and railroad started work on the construction of Fort Leonard Wood. Trouble was immediately encountered with mud because of the lack of roads and large trucks were pulled apart, trying to haul material 1,000 ft. To overcome this, the contractors installed five rock crushing plants, and main highways and other streets at the campsite were graded and surfaced with crushed rock. A total of 56 miles of streets were graded and surfaced. Two highway outlets were improved and surfaced with rock or gravel by the contractors, one a highway four lanes wide out to U. S. Highway No. 66, and the other a supply road to Newburg, Mo.

At the same time, a valuable lesson had been learned in the preliminary grading for the railroad, which had been started on December 5. Here too, the contractors filled in mud holes and widened various farm trails, which were necessary for construction purposes and for the transportation of materials and supplies. In addition, it soon became apparent that the carryall scrapers originally shipped for the grading work would be of limited usefulness because of the large amount of rock excavation. During the location of the railroad, time did not permit drilling to determine accurately the amount of rock in the various cuts, but electrical soundings were taken for a rough determination. On most of the hills, only a thin layer of top soil, consisting principally of red clay and gravel, overlays a considerable depth of sandstone rock. Below the sandstone is a very hard limestone, known as Roubidoux limestone. Compared to the limestone, the sandstone is relatively easily drilled and blasted.

This Trestle Required the Driving of 80-Ft. Piles. Difficulties Were Experienced, in Spite of Priorities, in Securing the Necessary Creosoted Piles and Bridge Timbers

When the difficulties of the work became apparent, the contractors scoured the Middle West for heavy equipment, including large shovels, compressors, rock-drilling equipment, etc. Large draglines were also secured for borrow work, when it was decided that the need for construction speed would require that a large amount of

yardage be wasted at various locations and side borrow be obtained at other locations, to eliminate excessive haul. This equipment was secured on a rental basis and some of it came from states as far away as Pennsylvania, Colorado, Texas and Minnesota.

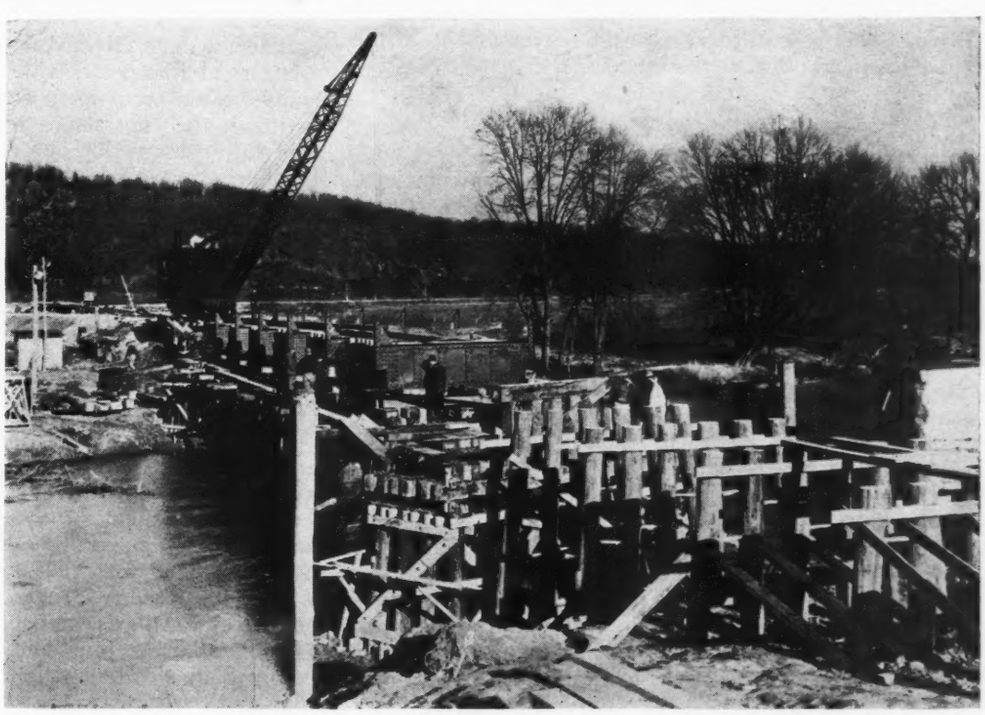
On January 23, when the location to Big Piney had been completed and the right-of-way condemned, the heavy construction work began with a tremendous rush. At the same time, the contractors got their first good "break"—the weather had moderated a week before and remained favorable until the grading was substantially completed. Shovels, draglines, tractors and dump wagons, compressors and rock-drilling equipment moved in so fast that the railroad engineering corps, which had been expanded from 12 to 60 men, was hard pressed to get slope stakes set ahead of the excavating equipment. The clearing was completed rapidly and large crawler-tractors equipped with bulldozers quickly finished the grubbing.

The work progressed day and night, 24 hours-a-day, in three shifts of 9, 8 and 7 hours. The day operators on the 9-hr. shift were also responsible for greasing and oiling their equipment. A large proportion of the equipment was concentrated on the largest cut, Summit Cut, and other equipment was distributed on various cuts between the end of the grading already completed and the campsite. The equipment used in this section, consisted of 23 shovels and 7 draglines, each with capacities ranging from 2 to 3½ cu. yd.; 28 large compressors ranging in capacity from 315 to 550 cu. ft.; 25 wagon drills; 8 sheepsfoot rollers; 3 pull-graders; 30 carryalls; 54 trucks; 93 tractors, of which 24 were equipped as bulldozers; 65 lighting plants; 14 water pumps and hundreds of accessory items of equipment. Later, the number of draglines in use was increased to 10. All of the equipment was Diesel-powered and all of the equipment, except the crawler-mounted types, was pneumatic tired.

To Speed Track-Laying Operations, Five Separate Gangs Were Employed

Used 384,000 Lb. of Dynamite

The earth excavation at Summit Cut was soon removed and drilling and blasting were started. Other cuts in the vicinity were being dynamited at the same time and for a period of about five weeks, until the major portion of the rock excavation was completed, 70,000 lb. or approximately one carload of dynamite, was used each week. The total amount of dynamite used on the entire railroad construction was 384,000 lb. An average of 40,000 to 50,000 cu. yd. of rock was excavated daily and on one day approximately 70,000 cu. yd., mostly dirt, was removed. Summit Cut was by far the largest



The Construction of the Little Piney River Bridge Was Started As Soon as the Wye at Bundy Junction, in the Background Had Been Completed

cut on the line, being 3,150 ft. long and containing 187,000 cu. yd. of excavation, of which 105,000 cu. yd. was rock, mostly sandstone. This was also the deepest cut at the center line, 46 ft., although, due to the side hill nature of most of the remaining cuts, it was not the maximum excavation, the maximum being 78 ft. on one side in a cut about one-half mile south of the Summit Cut.

As previously mentioned, in order to save time because of the long haul involved, a large amount of yardage was wasted and side borrow was obtained for some of the principal fills. Most of the yardage wasted was at Summit Cut, where nearly all of the excavation was wasted on top of the cut on both sides. The total excavation for the line, including that for the warehouse tracks at Fort Leonard Wood and several farm relocations alongside the track, amounted to very nearly 1,900,000 cu. yd., of which approximately 1,700,000 cu. yd. was for the main track to the Fort. Of this total, approximately 200,000 cu. yd. was borrow and of the remainder, approximately 75 per cent was earth excavation and 25 per cent solid rock excavation.

The cuts were excavated with side slopes of 1½ to 1 in earth excavation and varied from 1 to 1, to ½ to 1 in rock. The width of the base at subgrade varied from 27 ft. to 29 ft. wide, depending upon the side slopes. This width is based upon a 20-ft. crown and a 2 to 1 slope from the subgrade shoulders to the ditches, which are one foot below subgrade and one foot wide at the bottom.

The fills have a 20-ft. crown width and 1½ to 1 slopes. Shrinkage was not provided, since the dirt was compacted with sheepsfoot rollers in 6-in. to 8-in. layers. The sheepsfoot rollers were not used, however, to compact rock placed in the embankments, but the heavy tractors and other earth-moving equipment operating over these fills provided good compaction. This was particularly true of the sandstone rock which, when blasted, broke into a wide range of sizes and contained a considerable percentage of fine material. Sidehill slopes under embankments were heavily benched before the embankment material was placed.

The longest fill was 9,000 ft. long, located near the beginning of the line just south of Little Piney River bridge. This fill, however, did not have the largest yardage. The biggest fill, from a yardage standpoint, was at Station 970 (mile post 18½) which contained 141,800 cu. yd. The latter fill was also the highest, 62 ft. at the center line, and 68 ft. at the west edge.

Bridge Work

As soon as possible after the location was completed on each section of the line, work was begun on the bridges. The largest of these was the Big Piney River bridge, 1,767.9 ft. long, which consists of two 152-ft. 6-in. through pin-connected truss spans on concrete piers, 33 panels of pile trestle approach on the north end, and 75 panels of pile trestle approach on the south end. The work on Little Piney River bridge, which is 976.5 ft. long, and consists of one through pin-connected truss span 163 ft. 6⅞ in. long, 6 panels of open deck pile trestle on the north approach, and 46 panels of open deck pile trestle on the south approach, was nearly completed by the time the location had been established to Big Piney river. The skew of the second-hand through connected truss span over Little Piney river, which was secured from the Frisco, had to be reversed to fit the skew of the river crossing. This was done by the Frisco before shipping the steel for this bridge to the job. One other bridge on this line is worthy of mention; this is a 26-panel pile trestle, 351.0 ft. long and 50 ft. high, near MP 10½, which required the use of 80-ft. piling.

For the bridge work, various types of equipment were used, including crawler cranes, skid rigs, drop hammers, steam hammers, power saws, boilers, hoists, etc. On the two steel bridges, two crawler cranes with swing leads and a steam hammer were used to drive the piling on the trestle approaches. These cranes were also used to handle the steel during the erection of the trusses. A skid rig with a stationary boiler, hoist and drop hammer mounted on the rig, was used to drive the piling for the other trestles. All of the pile trestles are open deck structures with 6 piles per bent, 14-in. by 14-in. caps, and four 8-in. by 16-in. stringers under each rail. The bents are spaced 13 ft. 6 in. center to center. Some untreated cypress piles were driven, because treated piling could not be obtained in time. These piles were painted with creosote, and it is estimated that they will have a life of about 10 years. No reinforced concrete boxes were constructed on this line, because of the time element involved in their construction. All of the small drainage openings were provided with corrugated metal or concrete pipe varying in size from 24 in. to 75 in. in diameter. Several lines of pipe were used where larger openings were required. A large amount of rip-rapping was necessary on this line. The rip-rap was secured locally and placed by hand. At the toe of the rip-rapped slopes, at Little Piney crossing piling 10 ft. long were driven on 2-ft. centers to a penetration of 7 ft., leaving 3 ft. of the piles projecting. All piling used in this manner for anchoring the rip-rap was selected from rejected cull piles.

Rail Laid By Five Gangs

By the time the location from Big Piney river to the camp site had been completed, most of the grading had been finished on the remainder of the line and the shovels, draglines and other equipment were moved into this section en masse and again made astonishing progress in the movement of earth and rock. About this time rails and fastenings, ties and other track material began to arrive at Bundy Junction, which had been used instead of Newburg as an unloading point for railroad materials for some time. Two self-propelling track-mounted cranes were used at this point for unloading and handling material. It was originally intended to lay the rail progressively from Bundy Junction to the Oak Flats and establish a material yard and railroad construction headquarters at this point, which was the most suitable centrally-located point for a construction camp. With this in mind, the contractors had established an office and railroad construction headquarters, with repair and maintenance facilities for their grading equipment, at this point when the work was started on Summit Cut, which was located nearby.

However, the rail began to arrive in large volume by the time the grading was nearing completion and it was decided to speed up rail laying by starting gangs at five different points, each working south toward the camp, each gang consisting of 25 men. The ties, rails and fastenings were distributed by truck, with the exception of those laid by the gang working south from Bundy Junction, which used a Frisco rail crane, for distributing and handling the rail, although the remainder of the track material was distributed by trucks.

Seventeen miles of the main track were laid with second-hand 110-lb. rail and the remainder with second-hand 100-lb. rail. The angle bars on the main track were of the head-free toeless type, 24 in. long with four bolt holes. All ties were plated. The tie plates on the 110-lb. rail were four-hole single shoulder plates, 10½ in. by 8 in. in area with the rail seat canted 1 in 40. Similar tie plates were used under the 100-lb. and 90-lb.

rail. All turnouts were No. 10, of 110-lb. rail. Tangent track was laid with 6-in. by 8-in. by 8 ft. creosoted ties and curves with 6-in. by 8-in. by 8-ft. 6-in. creosoted ties. All passing tracks and the warehouse tracks at Fort Leonard Wood were laid with 90-lb. or 85-lb. rail. Tangent track was spiked with four spikes to the tie. Curves sharper than four degrees were double spiked on the gage side of the high rail and in addition, insulated gage rods were applied in numbers varying from four to the rail on 4 deg. curves to eight to the rail on 8 deg. curves. Six rail anchors were applied to the rail in a manner to prevent movement in either direction, except on the heavy grades, where eight anchors were applied to each rail, six preventing movement downhill and two in the opposite direction.

As soon as the rail was laid to the Oak Flats and temporary yard tracks had been constructed at that point, ballasting was begun. Joplin chatt, ranging in size from ¼-in. to 1¼-in., was used on the first 17 miles, and rock ballast, ranging in size from ½-in. to 1½-in., was used on the remainder of the line. The rock ballast was secured from the crushing plants installed by the contractors for surfacing the roads at Fort Leonard Wood and was hauled by truck to a large stock pile on the wye at the Fort. From this stock pile the ballast was loaded into ballast cars by a crawler-mounted crane equipped with a clamshell bucket. Gangs followed the ballast distribution, making a lift of approximately 6 in.; this was followed by a second lift of 4 in., and will be followed at a later date by another finishing lift of about 2 in., placing a total of 12 in. of ballast under the ties. Frisco work trains and a saddle-tank or "Dinkey" construction locomotive were used for the distribution of the ballast.

A complete system of automatic block signals of the upper quadrant semaphore type, similar to those in use on the main line of the Frisco, was installed. Crossing protection, consisting of flashing light signals, was placed at four crossings. The signaling of this line was necessary, even though the normal traffic to Fort Leonard Wood is expected to average only about six trains a day in each direction because the War Department wants a railroad that will be capable of handling sufficient troop trains to move the entire personnel of the camp, 40,000 officers and men, in or out in a minimum of time in case of emergency. The signals are located at each end of the four passing tracks and are spaced from 2,200 ft. to 3,500 ft. apart at intermediate points, depending upon the curvature, grades and visibility.

On April 19, the first passenger train, a dedication special for various high-ranking army officers, Frisco officers and St. Louis business men, consisting of the construction "Dinkey" and two flat cars improvised into observation cars, was operated over the line. The first troop train was operated over the line on May 13, and the line was officially opened for traffic on May 25. The Frisco operates the railroad and does all switching under terms of an operating contract consummated May 7, 1941. Train speeds are limited to 35 m. p. h., although the curves have been given sufficient elevation for a speed of 40 m. p. h.

The final ballast raise on this line will be made under traffic. Fire stops will also be installed later on all trestles over 10 panels in length. In addition, two concrete piers must be constructed for the truss span over Little Piney river, since solid rock not far below the bottom of this stream, did not permit sufficient penetration of the piling in the pile piers. The new concrete piers will be constructed 15 ft. south of the present pile piers and the truss span will be moved longitudinally to its final position on the new piers, adding one bent of pile trestle to the north approach and shortening the south approach.

During the period before the final location was completed, all materials were ordered that could be ordered in advance before the final requirements had been ascertained. This was one of the most important steps, because events proved that although the materials ordered for the project had the benefit of the highest government priorities ratings, some of them, especially heavy creosoted bridge timbers, long piling and wrought iron bridge hardware, were almost impossible to obtain.

Nearly all of the rails, ties, track fastenings, switches, telegraph poles, etc., were secured by the purchase outright of material released from a 20-mile line change on the Atchison, Topeka & Santa Fe in Colorado. This material, which included 110-lb. rail and switches, was in excellent condition. More second-hand rail of 100-lb. section for the main line and 90-lb. and 85-lb. rail for sidings and warehouse tracks was purchased second-hand from the Chicago & Eastern Illinois. The three second-hand truss spans were purchased from the Frisco. Some of the other bridge and culvert material had to await the final location and determination of drainage areas before it could be ordered. Considering the rapidity with which the grading work progressed after the final location was completed, it is notable that in only one instance was the work held up by an incompleted bridge and this was due to a lack of material. In this instance, three lines of large diameter corrugated pipe were installed temporarily and filled over with embankment and an 11-panel pile trestle was constructed later.

All materials were ordered for six weeks delivery and in many cases where low bidders were unable to comply with this condition, the business was given to other concerns, or substitute materials were ordered that could be delivered. In some cases when the material failed to show up on the date specified, or shipping notices had not been received, if other methods failed, "expeditors" were sent to various points all over the United States to "expedite" the shipment of the materials ordered. Other men were sent to smaller sawmills and other concerns to locate the bridge timbers so badly needed for the railroad construction. In one instance, untreated bridge timbers were purchased on the Pacific Coast, shipped to Denver, Colo., for creosote treatment, and were then shipped to the job. An aggressive policy was pursued throughout in purchasing materials and in insisting on prompt deliveries.

Skilled Labor Scarce

Another major difficulty in the construction of Fort Leonard Wood and also of the railroad, was the lack of skilled labor. On the railroad construction work, nearly all of the grading equipment was accompanied by its regular operators, mechanics and greasers. This would have solved the problem for this equipment if only one shift a day were worked, but when working three shifts a day it became necessary to make operators "over-night" out of the mechanics and greasers and even out of new employees, and to find others sufficiently skilled to serve as mechanics and greasers. There was an ample supply of unskilled labor, however.

People from all over Missouri and adjoining states arrived in cars and trailers and the valleys along all the little streams for miles around were filled with temporary camps of all sorts, since housing and hotel facilities were practically non-existent. Vacant houses and hotel rooms in Newburg, Mo., and Rolla, Mo., 27 and 35 miles by highway, respectively, from Fort Leonard Wood,

(*Continued on page 1010*)

The East and West Lines Would Eliminate "Feather Bed" Rules

Carriers make proposals to transportation unions seeking 30 per cent wage increase

OUTMODED working rules and bases of payments for employees in engine, train and yard service were thrown open for overhauling last week when the railroads in the eastern and western territories served formal notice of intent and desire to revise existing agreements governing rules and work conditions.

Among the demands pending are those of the locomotive engineers, made on March 18, 1939, which call for rates of pay based on horsepower of Diesel locomotives instead of weights on drivers and for an assistant engineer in the engine rooms of certain types of Diesel locomotives; that of the 14 non-operating unions, made on May 20, 1940, which seeks vacations with pay; and those of the firemen made on May 10, 1941, which involve higher pay on Diesel and coal-burning locomotives and a fireman-helper on each unit of locomotives. In addition to the demands pending, the five operating brotherhoods have announced that they will ask for a 30 per cent increase in basic rates of pay on June 10, and the 14 non-operating unions met in Chicago on June 4 to formulate a wage increase demand.

Western Railways' Proposals

Prior to the serving of their notices on May 26, member lines of the Association of Western Railways appointed a Conference Committee of Managers to handle all matters connected with demands of the five transportation unions. Members of the committee are: Chairman, F. G. Gurley, vice-president of the Atchison, Topeka & Santa Fe; J. Cannon, chief operating officer of the Missouri Pacific; J. D. Farrington, chief operating officer of the Chicago, Rock Island & Pacific; E. B. Hall, chief mechanical officer of the Chicago & North Western; H. H. Urbach, mechanical assistant to the executive vice-president of the Chicago, Burlington & Quincy; A. D. Williams, superintendent of motive power of the Southern Pacific; C. P. Cahill, general manager of the Union Pacific and C. R. Young, manager of personnel of the Illinois Central.

The notices served by the western railroads differed according to classes of employees. Notice A was served on the general chairmen of organizations representing conductors and trainmen in road service; notice B on the organization representing yard service employees; notice C on the general chairmen of organizations representing engineers; and notice D on organizations representing firemen. The latter contains items identical with those included in a proposal served upon the firemen's organization on May 19.

The specific proposals are as follows:

Notice A. Conductors and Trainmen

1. Retention of the present standard basic rates of pay and elimination of all existing rates of pay which are higher than present standard basic rates of pay.

2. Elimination of all existing differentials for divisions, or portions thereof; or mountain or desert territory as compared with valley territory, whether expressed in the rates or in constructive mileage allowances.

3. Elimination of all restrictions upon starting of yard service employees at any time or place necessary to meet requirements of the service, and all penalty payments in connection therewith.

4. Elimination of all restrictions on road crews performing yard work and yard crews performing road work, and all penalty payments to either road or yard crews in connection with such performance.

5. Elimination of all payments to employees conflicting with the payment of single time from time of first going on duty until final release.

6. Elimination of all mileage regulations.

7. Establish limitation of thirty days for filing time claims.

8. Elimination of all rules restricting the hauling of freight on passenger trains and requirements for payment of more than passenger rates of pay when freight is hauled on passenger trains.

9. Elimination of restrictions upon the right of management to determine the number of employees necessary for the operation of any service, and to reduce or rearrange service and practices in conformity with business requirements.

10. Elimination of all doubleheader rules and restrictions on helper service.

11. Elimination of all rules imposing car and tonnage restrictions on trains.

12. Recognition of the principle that agreements in effect on a railroad are the sole basis for computing the compensation of employees.

Notice B. Yard Service

This notice consists of six changes which are the same as items 3, 4, 5, 7, 9 and 12 of notice A.

Notice C. Engineers

Items 1 to 9 inclusive and item 11 of Notice C. are the same as items 1 to 9 and items 12 of Notice A. Item 10 of Notice C. reads as follows:

Elimination of all restrictions against requiring engine crews to handle their engines between passenger station, freight yard and roundhouse as part of their trip or tour of duty.

Notice D. Firemen

1. Retention of the present standard basic rates of pay and preservation of existing differentials between oil and coal burning locomotives and between steam and electric locomotives and elimination of all existing rates of pay which are higher than present standard basic rates of pay.

Items 2 to 9 inclusive and item 11 are the same as items 2 to 9 and item 12 of Notice A.

10. Elimination of all restrictions against requiring engine crews to handle their engines between passenger station, freight yard and/or roundhouse as part of their trip or tour of duty.

C. E. Johnston Outlines Position of Western Lines

In statement released on June 3, C. E. Johnston, chairman of the Western Association of Railway Executives, outlined the position of the western lines and the conditions confronting them. He said:

"By announcing that they will demand an advance in their present wages of 30 per cent, over and above the rates established in 1937 and which are the highest ever paid, the transportation employees of the railways are seeking average hourly wages 38½ per cent higher than they received at the height of the country's prosperity in 1929. They give as one reason the 'increasing cost of living.' The cost of living in April, 1941, as reported by the Bureau of Statistics, U. S. Department of Labor, must increase 14 per cent to equal that of April, 1929. Therefore, measured by the cost of living—the purchasing power of their pay—these employees are asking wages 58 per cent higher than they received in 1929.

"Road service employees are paid a minimum wage for each day they work, irrespective of the number of hours worked. This is done on a dual basis; being either a wage for a minimum number of hours, or for a minimum number of miles of assumed train operation. Many such minimum payments are made for less than three hours' actual service. The earnings at present for many engineers who operate Diesel passenger engines, based upon time actually worked, is as much as $4 per hour. The total compensation of train and yard service employees in 1940 was $568,000,000.

"This announced demand comes at a time when the entire nation has been asked by the President to make a supreme sacrificial effort for the national defense. It is to be made by the men who are not only being paid the highest wages in the history of American railroads but who are also the beneficiaries of many so-called 'featherbed' rules, by reason of which they secure large payments for doing very little work and in many instances for doing no work at all. The statistics of the Interstate Commerce Commission show that the 'miles paid for but not run' in 1940 were 11 per cent as much as the 'miles actually run.'

"The railways of western territory have sent notices to the transportation brotherhoods proposing changes in the working rules that result in the large payments being made for 'featherbed' service. They have proposed to the locomotive engineers and firemen 11, and to the conductors and trainmen 12, changes in these rules.

"For example, one proposal is for 'elimination of all restrictions upon starting of yard service employees at any time or place necessary to meet requirements of the service and all penalty payments in connection therewith.' The Railroad Adjustment Board has approved claims for substantial sums because of complaints that an employee was started to work slightly earlier than the employees considered he should have been under the existing agreement.

For instance, one railroad was ordered to pay a penalty of 12 hours' wages for work on each day from 6:15 a.m. to 6:30 a.m. simply because the employee began work before 6:30 a.m.—and this 'penalty' payment was in addition to the 8 hours' regular wage that had to be paid for the 7 hours and 45 minutes work done from 6:30 a.m. to 2:15 p.m.

"Another proposal made by the railways is the 'elimination of all restrictions on road crews performing yard work and all penalty payments to either road or yard crews in connection with such performance.'

"It will surprise most persons not familiar with railway operation to learn that in numerous instances the railroad adjustment board has held that when a train crew has done even a trifling amount of switching, not only must all members of the train crew be paid an extra day's wages for doing this switching, but that a yard crew which did not work at all must also be paid a day's wages. In 1932 when business had so declined that only about 3½ hours' switching per day was required, a railway discontinued assignment of a yard crew at a certain town and thereafter road crews did the switching at that place. From then until June, 1937, no claim was made that either the yard crew or the train crews should receive additional pay because of such discontinuance.

"In January, 1941, however, a decision by the adjustment board ordered the railway not only to pay the *yard* crew a day's wage for each day during the nine years following 1932 that the *train* crews did switching, but also to pay the *train* crews a day's wage at yard rates in addition to their regular wages for every time they did any switching. There have been more than 300 cases throughout the country in which railways have been ordered to pay in the aggregate many hundreds of thousands of dollars of this extra 'back pay' to train and yard employees who had already been paid for a day's work or who actually had done no work at all for it. In order to avoid for the future results such as those just mentioned one of the proposals made by the railways is to 'establish limitation of 30 days for filing time claims.'

Firemen Want Helper on Each Diesel Unit

"In addition to the large 'featherbed' payments the railways are now required to make to their transportation employees, some of these employees, besides seeking a 30 per cent advance in their wages, are demanding the adoption of other 'featherbed' rules. For example, the locomotive engineers are demanding the employment of an assistant engineer in the engine rooms of certain Diesel locomotives, and at the same time the firemen are demanding additional firemen by asking for the employment of one fireman on each unit of such locomotives which are now being extensively put into both passenger and freight service. This is merely another effort to load down the railway payroll with wages for employees that are not needed. A Diesel locomotive is so constructed that it may be argued that it consists of one, two, three or even four 'units.' It is, however, a single locomotive, and for all the millions of miles run by Diesel road engines since their inauguration seven years ago one engineer and one fireman have been used; thus there has been ample demonstration that no additional engineers or firemen are needed. But if the demands of the engineers and firemen were granted, it would be necessary to have four of these engineers and firemen on a Diesel locomotive of two units; five on one of three units, and six on one of four units. It is not clear why all these men are demanded upon a Diesel when only one engineer and one fireman are required on a steam engine capable of rendering the same transportation service.

Present pay of firemen on coal-burning locomotives is higher than on Diesel and oil-burning locomotives. On the latter there is no coal to be shoveled; but the firemen are now demanding that their wages on Diesel and oil-burning locomotives shall be made as high as on coal-burning locomotives.

"In addition to all the above, the fourteen unions com-

posed of employees not in train service are negotiating for vacations with pay, and information reaching railway management indicates that they will soon meet to decide on demands for advances in wages.

"The western railways serve a predominantly agricultural territory. Last year they derived 28 per cent of their freight earnings from transporting the products of agriculture. They desire, while paying their employees reasonably, to make their operating costs as low as practicable in order to serve the farmers and all their other customers satisfactorily at reasonable freight and passenger rates. They cannot do this if they must pay their employees excessive wages—and large amounts for work that is not done. The money for these expenses must come from charges paid for transporting agricultural products and other commodities incident to western commerce and for carrying passengers. An advance of 30 per cent in the wages of their transportation employees would add 72 million dollars a year to their operating expenses. An advance of 30 per cent to all their employees would add about 263 million dollars to their expenses. Granting of the other demands of the labor unions would still further increase operating expenses.

"Business on the western lines is better now than last year. It is quite evident, however, that there is no economic justification whatever for the demands for huge increases in their payrolls now being made by the labor unions, and it is obvious that these demands cannot be granted without the most adverse effects upon the western railways, and the farmers and other producers and shippers that they serve."

As reported in the *Railway Age* of May 31, eastern lines served notice upon the five engine and train service brotherhoods on May 27. The changes involve (1) the starting time of yard crews, (2) use of road crews to perform incidental switching at initial, intermediate, and final terminals, (3) the handling of freight in passenger trains, (4) establishment of a time limit within which employees may present grievances or claims.

Southeastern railroads this week filed with brotherhood representatives of their train and engine service employees formal notice of intention to effect changes in certain existing rules covering working conditions. Acting thus promptly these carriers laid the groundwork for a proceeding separate from any which may arise in connection with the wage demand of the brotherhoods. The maneuver is presumably designed to prevent any sidetracking of the rules-change demand until the wage controversy is out of the way.

When they issued their notices the Southeastern carriers had received formal notice in the wage matter only from the Brotherhood of Locomotive Firemen & Enginemen. That notice of the Firemen was answered with a demand for changes in the working rules; but this week the Firemen along with the Brotherhood of Locomotive Engineers, Order of Railway Conductors and Brotherhood of Railroad Trainmen received a new notice launching the rules-change case as a separate proceeding. This latest notice called upon the brotherhood representatives to join in arranging for conferences within 30 days, as provided in the Railway Labor Act.

The more important of the rules changes sought by the Southeastern roads are those which have been proposed also by the Eastern lines, as noted in the *Railway Age* of May 31, page 987. In other words they would modify rules covering the starting time of yard crews; the use of road crews to perform incidental switching at initial, intermediate and final terminals; and the handling of freight on passenger trains. Also, the Southeastern lines generally are expected to press for a new rule limiting the time in which grievances and claims may be presented.

Moreover some of the Southeastern lines may seek one or more additional changes, such as the elimination of existing restrictions on the amount of mileage, earnings or number of days of service a train-service employee may run up each month; and modification of rules relating to annulment of regular yard shifts on Sundays and holidays, the held-away-from-home-terminal rule and regulations relating to yardmen reporting late. Also, there may be proposals to change the runaround rule to provide that if payment for runaround is incurred it will be allowed only to the man standing first out at the time of the runaround; to alter rules covering payment for "time lost" to stipulate that any earnings made in other employment during time out of service should be deducted from amount due; to eliminate the rule providing for pay for final terminal delay.

Testifying before a Congressional committee last week, Leon Henderson, administrator of the Office of Price Administration and Civilian Supply, stated that he would oppose a 30 per cent increase in railroad wages if the increase could be absorbed only through increased transportation costs.

Uncle Sam Builds a Railroad—Fast!

(*Continued from page 1007*)

were taken after the first few weeks of construction. Temporary offices and barracks were constructed at the Fort for office workers, engineers and official personnel, although many of these stayed at Rolla or Newburg. A total of 250 temporary buildings were built and temporary water supply, fire department, policing and sanitation facilities were provided.

A better idea of the magnitude of the labor and housing problems which existed in this isolated and thinly settled region of Missouri may be realized from a few figures, which emphasize the size of the project. The peak payroll of the contractors for one week, including the work on both Fort Leonard Wood and the railroad, was $1,300,000, said to be one of the largest regular single payrolls in the United States at that time. The peak personnel of workers was 30,775; of engineers, 500; and of the office forces of the constructing quartermaster, general and subcontractors, 1006. On the railroad construction, the peak employment was 3,000 contractors' employees and 60 engineers. In spite of the large number of men employed, many of them unskilled, a fine safety record was maintained, with only four fatalities.

The achievement of the War Department, the engineers and the contractors in planning and completing Fort Leonard Wood and the railroad in a period of a little over five months and particularly the record of their achievement in railroad construction from January 23, when heavy construction really got under way, until April 19, when the first passenger train was operated, is truly one to be proud of. This record is a tribute to the men who were responsible, including Major Frank Reed, Jr., Constructing Quartermaster of the War Department; D. H. Maxwell, a junior partner of the firm of Alvord, Burdick & Howson, who was resident engineer for the entire project; L. H. Huntley, project manager; Robert McCune, general superintendent for the contractors and R. F. Bundy, resident engineer for the railroad construction. Col. Frank G. Jonah, chief engineer of the St. Louis-San Francisco, was consulting engineer for the railroad construction and valuable assistance was also given by other members of the Frisco engineering and maintenance departments on the location, construction and track work.

Photographs by Kaufmann & Fabry

The Diner Has a Restaurant-Like Atmosphere

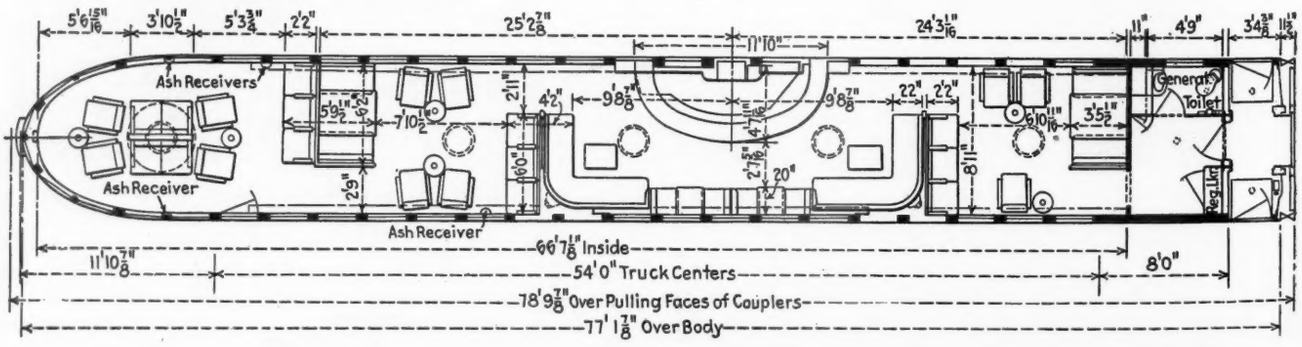
The "James Whitcomb Riley"

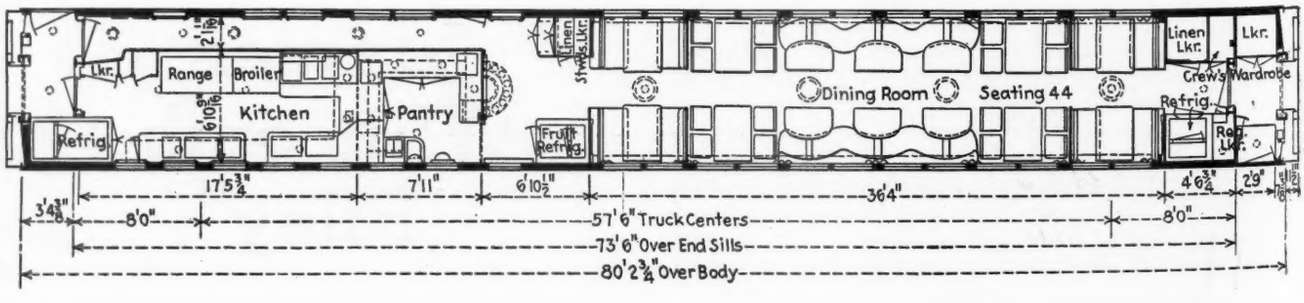
ON April 28, 1941, the New York Central inaugurated streamliner service between Chicago and Cincinnati, Ohio,—the "James Whitcomb Riley." This train, making a round trip daily, except Sunday, operates on a 5½-hour schedule and is made up of seven cars, with a streamline steam locomotive. It consists of a storage-mail-baggage car, four coaches, a diner and an observation-lounge car. The coaches were built for the New York Central by the Edward G. Budd, Company, Philadelphia, Pa., and the locomotive, storage-mail-baggage, dining and observation cars were rebuilt to conform to the design of the new train at the railroad company's Beach Grove, Ind., shops. The interior arrangement and decorative treatment of the observation-

lounge car, dining car, and the general exterior of the train were designed by Henry Dreyfuss, industrial designer, in collaboration with the railroad company's engineers. This article is confined to the principal interior features of the diner and observation cars which were rebuilt by the railroad company.

The diner has been designed with seating accommodations for 44 persons in contrast to 36 seats in the original

The Interior of the Lounge Section is Shown in the Photograph at the Top of the Page and the Floor Plans of the Diner and Observation-Lounge Appear Below





car and the semi-circular tables, used with the banquette seats in the center of the car, give it a restaurant atmosphere. A mirror partition replaces the old buffet, and this gives the impression of increased length, reflecting the soft tones and rich materials which have been used.

The floor is carpeted in a geometric pattern of rust and blue, and a delft blue ceiling panel housing the circular aluminum air-conditioning grilles runs through the middle of the center section of the car. The cove ceiling on either side of this panel is an off-white shade and indirect lighting is used. The end sections are panelled in walnut Flexwood and each section contains two tables with rust leather benches. The banquettes and chairs in the center section of the diner are upholstered in delft blue leather and window drapes are of tan and rust.

The observation-lounge car is separated by plate glass partitions into three sections, a small intimate lounge, a bar lounge, and the observation end. Rich colors of rust and blue predominate.

In the end lounge section there is an oil painting of James Whitcomb Riley—a copy of the famous John Singer Sargent portrait which now hangs in the John Herron Art Institute in Indianapolis, Ind. The end wall of the car on which this picture is framed is of pickled walnut, and this makes an effective background for the painting. In this lounge there is a divan covered in blue Needlepoint, and below the painting is a blue Formica-topped table with rust leather benches. Chairs are of bleached walnut, covered in a soft woodtone material.

The long narrow bar is of butt walnut with stainless steel trim and black Formica top. Fluted stainless steel on either side of a copper-colored mirror covers the back wall of the bar and forms an interesting design pattern. Rust leather sectional seats have been built in along the wall opposite the bar and form groups with built-in chairs and blue Formica-topped tables. Rust leather covers the wall space over the windows and the wainscot and curved bulkheads are walnut, bleached silver gray.

In the observation end the furniture is so arranged that most of the seats face toward the windows. The end of the car is completely glassed in and here, as in the smaller lounge, the blue divans harmonize with the rust leather benches and tan chairs. The floor covering is a carpet of pebbly texture in shades of rust, brown and tan. The ceiling is smooth. The observation lounge is lighted with continuous troughs of fluorescent light, which harmonizes with the soft tones of the car.

Both of these cars are equipped with the Frigidaire electro-mechanical air-conditioning system with 64-volt d.c. compressor motor and modulated cooling control. The heating systems are the Vapor overhead type and zone system at floor level, both thermostatically controlled. Current for lighting and air conditioning is supplied by a Safety 20-kw. genemotor operated by Spicer drive. Batteries have a capacity of 600 amp. hr. at 64 volts.

The center section of the dining car is equipped with indirect fluorescent lighting, located above the windows. Each dinette section is equipped with direct fluorescent fixture located in a frieze panel above the window. A combination air outlet and incandescent light fixture is located in the center of the ceiling.

The observation car has a continuous line of fluorescent fixtures which extends along the edge of the ceiling. Fluted glassware is used in these fixtures. White fluorescent lamps 1½ in. by 15 in., 14 watts, 60 volts d.c., are used in both cars; incandescent lights in passageways.

Top—At the End of the Lounge Section is an Oil Painting of James Whitcomb Riley and, Below, is a Closeup of the Bar

How RR "Peace" Is Maintained

Monograph of government staff of researchers highly critical of Adjustment Board

SPECIAL interest attaches to the monograph on the National Railroad Adjustment Board submitted last year by a special investigating staff working under the United States Attorney General to the latter's special Committee on Administrative Procedure, because its contents bear on the demand of "featherbedded" classes of employees for a 30 per cent increase in wages; and the counter-demand of some of the railroads that the "featherbed" rules be modified. The report apparently pleased neither labor nor management representatives. From one point of view, its value may be said to be enhanced by the fact that the researchers tackled their job with a knowledge of the ways of other federal bureaus, commissions and boards but without intimate experience with the Adjustment Board itself. Hence even the formality of the monograph fails to hide the astonishment with which they viewed certain of the "kangaroo court" practices which have grown up around the Board.

Although originally submitted to the Attorney-General's committee in February, 1940 (monograph No. 15) and, as revised, in April, 1940 (monograph No. 17), this interesting study remained confidential until shortly before the committee made public its report on January 15, 1941. It has now been made available to the public by the Eastern Committee for the National Railroad Adjustment Board in its 642-page reprint of documents relating to Board procedure.*

The researchers' study is an 85-page analysis of the National Railroad Adjustment Board as machinery for handling disputes, and a broad appraisal of its efficacy. While its contents have been challenged as to both fact and opinion by labor and management members of the Board, the study has value as a fresh, and original contribution. Hence without endorsement, the *Railway Age* sets forth *in paraphrase* the more important observations of the investigating staff.

Make-up of Board.—N. R. A. B. consists of four divisions, each representing different classes of employees:

Division I—Train-and-yard-service employees.
Division II—Maintenance of equipment employees.
Division III—Station, signal, telegraph, m. of W., store, Pullman and dining car employees.
Division IV—Marine and other employees not otherwise represented.

Personnel.—The four divisions of N. R. A. B. comprise 48 board members. Divisions I, II and III have 10 members each, and Division IV, six members. Board members are selected and paid by their respective principals, not by the government. Carrier members of Division I are paid $12,000 per year; carrier members of other divisions, $10,000; Division IV members serve only part time, but are paid at the rate of $10,000; labor members vary from $3,600 to $10,000.

Work of Divisions.—Division I handles nearly 80 per cent of all cases of the Adjustment Board and Division II only 6 per cent, although Division II represents more employees. Reasons: Complication of transportation services due to arbitraries, penalties and special allowances; longer organization of transportation unions; relative uniformity of shop craft rules all over the nation; defeat of shop crafts in 1922 strike.

Rules of Procedure.—The Adjustment Board does not apply rules of evidence; calls no witnesses under oath; representatives are not subject to cross-examination; unsworn statements, written and oral, of the parties' representatives are considered; does not utilize depositions; has no power to subpoena witnesses, books and records; has as yet denied all petitions for re-hearing (there are no rules to cover; such as have been filed have been considered upon their contents).

Witnesses.—The Board does not permit testimony of witnesses. So long as it is bi-partisan in character it could not successfully wield the subpoena power. Labor members would want to subpoena a number of railroad presidents and documents which would satisfy their curiosity about railroad management, but which would contribute little. Carrier members likewise would tend to require disclosure of union secrets.

"Raw Material" of Disputes.—Job of N. R. A. B. is to adjudicate disputes by reference to labor agreements. These are "surprisingly comprehensive documents" brought into being through processes of collective bargaining in accordance with the requirements of the Railway Labor Act. As of June 30, 1939, there were 4,069 agreements on record, of which 3,556 were with national labor organizations.

Submissions.—The law permits disputes to be referred to the Board by either party, but only one case is remembered in which a railroad made a submission. Submissions in more than 80 per cent of the cases are made *Ex Parte* by labor unions and in the remaining cases are made jointly by the labor unions and the carriers.

Individual Employees Get "Bums' Rush."—Although in 400 cases individuals have sought to assert claims before the Board, with the exception of a few isolated cases in Division IV, no such individual case has ever been decided on its merits by the Board. Those members of the union who are not in good standing, members of minority unions, and individuals who do not choose to join any union, as well as those who are ineligible to join a union, have no access to the adjudicatory processes of the Adjustment Board. Negroes, for example, who are not admitted to union membership, are outside the pale. Labor members of the Board refuse to permit individuals to assert claims; they are equally intent upon denying to individuals the power to appear in opposition to claims asserted by others.

Time-Wasting by Oral Reading.—Rebuttals to submissions are called "written oral arguments." They are exchanged by parties in advance of hearings in Divisions I and II. The hearing is little more than a reading contest. Reading to deaf ears is a cherished privilege. Occasionally, but not usually, parties agree to "stand on the record" and will read orally neither the submissions nor the arguments.

Bi-Partisanship.—"Members on both sides serve only at the will of their respective principals, and although some members are reluctant to acknowledge it, the principals' wishes usually seem to take precedence over all other considerations in determining the Board's policies. The Board is thus bi-partisan in fact as well as in theory."

"Labor is intent upon retaining the present system, while the carriers tend to favor something more nearly approaching non-partisanship."

"It seems to be a fact that about once every two weeks tempers in Division I become so inflamed that one Board member challenges a Board member of the other side to a fight. . . . It is said that never yet have a labor member and a carrier member of Division I lunched together. . . . Members of Division I on both sides have not hesitated to express to an outsider their firm conviction that members of the other side are 'dishonest,' 'unfair' and 'indecent,' and the language is not always limited to such printable terms."

Referees Are Judges.—Since the referee is not a representative of one of the parties, decisions the Board makes with his assistance more closely resemble adjudication than mere adjustment or settlement.

Referees Handle Important Cases.—Statistics of cases

* Contents described in the *Railway Age* of January 25, page 224. Contents of Book I other than monographs Nos. 15 and 17 and conference thereon had already been reported in preceding issues of the *Railway Age*, as listed in the summary.

with and without referees do not tell the whole story, for "most of the cases which are decided by the Board without referees are the relatively easy and clear cases that admit of little room for honest differences of opinion. Possibly it is not too strong a statement to say that virtually all of the important and doubtful cases are decided by referees, except in Divisions II and IV, whose cases are relatively few in number."

Picking Referees.—The law states that the division may agree upon and select a referee ten days ahead of deadlock and certify his name to the Mediation Board otherwise, the latter appoints the referee. Divisions I and III assume that they cannot agree upon a referee and customarily do not even go through the motions of making the attempt. Division II often chooses a referee within the ten-day period.

Do Referees Have the Facts?—Referees do not have access to a record of significant argument preceding their participation in cases. The question is a difficult one. Disputes often arise about the mere question whether or not particular statements were made in extemporaneous argument. On the other hand, members of both sides seem to believe that transcripts would invite representatives of parties to make speeches to "impress the folks back home."

The question of whether or not parties should be given an opportunity to file briefs and to make oral arguments to the referee is also a troublesome one. Divisions II and IV permit both briefs and oral arguments. Division III permits oral arguments. In Divisions I and III carrier members vote in favor of according these privileges, and labor members vote against. (In Division I both oral orguments and briefs are denied.) The railroads complain bitterly about this, claiming that the referee is actually an adjudicator, and not an additional member of the Board.

Are Referees Unhampered?—It is a well-known fact, confirmed by both sides, that in at least one instance labor members of the Board heaped such severe personal abuse upon a referee who was thought to be about to decide in favor of the carriers that the referee could not endure further unpleasantness and resigned without deciding the cases before him.

Permanent Referees?—Present temporary referees are unfamiliar with problems of railway labor; appointment of a permanent referee on full-time basis would make for expertness. Use of referees on a per diem basis was intended to be an exceptional, rather than a commonplace incident. Permanent referee sitting in would not receive such a high fee as $75 per day, or $22,500 for 300 days. More economical if all referees would sit in from the beginning in order to avoid repetition. Labor members uniformly oppose appointment of permanent referees, giving as a reason, that every man has a price and can be "reached" by the carriers. "It is hard to believe that this reason is at all meritorious, despite the striking frequency with which the representatives of labor advance it in support of their opposition to permanent referees. One referee who has served in hundreds of cases says that he has never had any suggestion of any kind of improper influence from either side, but he is inclined to the view that labor would be able to exert a greater influence upon referees than would the carriers."

No "Stare Decisis."—N. R. A. B. does not generally follow precedent of previous decisions, or *stare decisis;* Division I does not even write opinions. Hence, identical problems repeatedly have to be carried all the way to a referee before the parties will consider themselves bound. One member observes that in one month 93 cases were deadlocked by Division I, all involving a principle announced previously in 300 cases without an exception, with the assistance of nine referees. Carriers have consistently refused to acquiesce with the road-yard rule, decisions on which have uniformly accepted the basic principle advocated by the unions.

Carrier members of Division III frequently write dissenting opinions when referees render adverse decisions. Labor members of the Board have never filed a dissenting opinion.

Division I does not write opinions explaining and justifying awards, while opinions prepared by other divisions are not always adequate for a thorough understanding of the cases. Although Division I claims that it has insufficient time to prepare such opinions, time would actually be saved in studying past cases if opinions had been prepared.

High vs. Low Officers.—It is sometimes asserted that the highest union officers are less unyielding in their demands than are some of the subordinate officials. To the extent that this is true, possibly of considerable importance is the practice of a number of the unions of requiring their chief executive officers to pass upon all claims before they are presented to the Board. The transportation unions, on the other hand, have not always followed this practice, and this very difference is probably a factor which contributes heavily to the large volume of cases reaching Division I and the relatively small volume of cases reaching Divisions II and III.

Absence of Statutory Limitations.—Claims five years old are frequent, some of which have even gone back more than 15 years. 'A statutory limitation seems obviously desirable. A referee describes the vice that has grown up as follows: A case, we can say, may have been submitted to this Board in 1936 on one railroad, and a decision rendered in 1938 sustaining the claim. A general chairman on another railroad sees this decision, and he recognizes it as the same state of affairs on his road subsisting since 1935. He immediately files a claim for 1935 and all subsequent dates. This is highly inequitable. It is no answer to say that if the rights were his *ab initio* they still are. Had he asserted claim in 1935, the carrier may have corrected the condition. Again, the question itself may have been a highly debatable one before the decision."

Enforcing Awards.—"Theoretically, the railroads do not need to comply with an award until an action is brought in court to enforce the award. The theory does not accord with the fact, however, because in practice the unions are usually sufficiently strong that they can use their economic power to enforce the awards without going to court. This can be done by permitting a number of unenforced awards to accumulate and then taking or threatening to take a strike vote to compel the carriers to comply with the awards. Of about 5,000 awards that the Board has made to date, not more than a half dozen enforcement proceedings in court have been brought, and yet the great preponderance of the awards have been complied with. At the present time, shop crafts have about 48 awards which have not been enforced, which they do not intend to take to court because they believe they would not prevail, and which they do not expect to enforce through economic power because each claim is an individual claim not involving sufficient community of interest."

Neither the labor nor carrier members of the Adjustment Board who met with members of the Attorney General's special committee to discuss the contents of the monograph expressed much liking for it. E. W. Fowler, a railroad member from Division I, expressed indignation at the "wholly unjustifiable personal incriminations leveled at the carrier members of the First Division, credited to your agent in an 'ex parte' investigation of Adjustment Board affairs and whose indulgence in personal accusations obtained from hearsay statements, with no opportunity of corroboration or otherwise on the part of the accused."

Paul M. Carter, a labor member from Division I, disagreed strongly with phrases in the monograph like "lack of success" and "failure" indicating that the Board is inefficient. "I bring out the thought now that criticize this board as you will, it has been a success," Charles J. MacGowan, a labor member of Division II, in discussing the monograph's apprehension over the bi-partisan character of the board, presented the unions' viewpoint as antagonistic to any change in this character, stating that the results of tri-party representation on the old pre-1926 Labor Board led labor to lose faith in it.

Shortly after this all-day conference, all labor members on the Adjustment Board submitted a joint statement to the committee. Therein they stated that they "view with apprehension any effort to change or modify the procedure of the Board, even in the interest of uniformity. . . . Criticism of either the law, its machinery, or its procedure emanating from representatives of management is neither sympathetic nor constructive, but is part of a definite desire to change the rules of the game so that management will have advantages never intended by the law itself."

NEWS

Referees Slow Since Pay Cut

Daily fee lowered from $75 to $50, the boys now are little more leisurely

Reporting on proposed appropriations for the National Mediation Board and National Railroad Adjustment Board for the fiscal year ending June 30, 1942, the House of Representatives committee on appropriations this week cited evidence adduced at hearings before its sub-committee which indicated that Adjustment Board referees have not been handling cases as rapidly since their compensation was cut from $75 per day to $50 by a limiting provision of the 1941 appropriation act. The committee recognized that no standard rule can be arrived at as to the time element, but it is hopeful that the Adjustment Board will give the question consideration "with a view to insuring that adequate return in services rendered is made to the government for its expenditure for this purpose."

Meanwhile the $50-per-day limitation is carried forward another year in the present bill—H. R. 4926, the so-called Department of Labor-Social Security Appropriation Bill. For the Mediation Board and Adjustment Board it carries a total appropriation for fiscal 1942 of $375,500 as compared with a budget estimate of $383,900 and appropriations of $367,900 for the current year ending June 30, 1941. Included is $45,000 for services of referees, an increase of $10,000 over last year's $35,000, but $5,000 less than the $50,000 sought.

With the reporting of the bill, testimony at the aforementioned sub-committee hearings was made public. Appearing there on behalf of the Mediation Board were its three members—Chairman George A. Cook, Otto S. Beyer, and D. J. Lewis. The Adjustment Board was represented by Paul M. Carter, one of the labor members; R. F. Ray, one of the carrier members; and Leland Howard, administrative officer. Chairman Cook made a general statement and answered questions about the work of the Mediation Board. Among other things he told how members of the Board try to get into the cases "personally," and to proceed "as quietly and unostentatiously as possible." Later on Mr. Lewis broke in to say he was "absolutely astounded on going into this Board and finding the economy and effectiveness of their work."

Testimony with respect to the Adjustment Board was devoted in large part to questions and answers about the efficiency of referees since the aforementioned cut in their daily compensation. When Representative Tarver, Democrat of Georgia and chairman of the sub-committee, asked if the Board had been inconvenienced by the $50-per-day limitation, Labor Member Carter said that the Board did not think that the "government's end of the proposition" was any of the Board's business; but he went on to observe that the cost per case handled had gone above what it was "under the previous type of set-up with the type of men they were getting at that time." Whereupon Mr. Tarver asked if the $75 per day had enabled the Board to get "higher quality or better class of men." Mr. Carter would not say that, but much additional questioning failed to give Mr. Tarver what he regarded as a satisfactory explanation of the increased cost per case. However, Carrier Member Ray suggested that the explanation might lie in the fact that both sides are preparing cases more exhaustively than before, and thus the referees require more time to review the presentations. Before the discussion was concluded Representative Thomas, Democrat of Texas, had nominated a candidate for appointment as referee. He suggested to "whoever is the proper one to submit it" the name of Judge J. T. Hutchinson of the United States Circuit Court for the Fifth Circuit.

Data submitted at the hearings show that 37 per cent of Adjustment Board cases disposed of in fiscal 1942 required the services of referees. The referees of that year worked a total of 704 17/28 days, disposed of 666 awards and were paid a total of $46,883. Nearly half of that amount—$22,694—went to Frank M. Swacker of New York, who worked 323¼ days and disposed of 369 awards. In his testimony, Labor Member Carter said that Mr. Swacker "turns out awards faster over there than any man we have today sitting before the Board."

Representative Keefe, Republican of Wisconsin, was interested in the status of an individual employee before the Adjustment Board. Mr. Carter agreed that if a union refuses to file a complaint on behalf of an individual "he is practically hopelessly out of any scope of this act"; but the labor member went on to state that such an individual may take his case to court under the recent decision of the Supreme Court in Moore v. Illinois Central Railroad.

I. C. C. Denies A. T. A. Petition for Express Investigation

The Interstate Commerce Commission has denied a petition filed by American Trucking Associations, Inc., asking for an investigation of the character of transportation embraced in "express business."

High Court Rules On K. C. Produce

Upholds lower court in forbidding K. C., Kan., and U. P. to induce dealers to move

Further interpreting provisions of the Elkins Act, the United States Supreme Court at its final session of the 1940-1941 term, in a four to three decision, upheld provisions of an injunction granted by a United States District court in Kansas City, Mo., prohibiting Kansas City, Kans., and the Union Pacific from making concessions to Kansas City, Mo., produce merchants to induce them to move into the new food market in Kansas City, Kans.

The decision of Justice Reed affirmed the finding of the lower court to the effect that the proposed concessions would have the effect of making illegal transportation concessions to the merchants who also are produce shippers. Justice Roberts wrote a lengthy dissent which was subscribed to by Justices Douglas and Black, in which he would have denied the injunction, holding that the making of concessions to merchants by the city of Kansas City, Kans., could not be linked with transportation and that Congress had no such intent when it passed the Elkins Act.

Briefly, it may be said that the court found that in 1937 the Union Pacific, acting upon the suggestion of two promoters, De Oreo and Fean, formulated a plan for the construction of a new market in Kansas City, Kans. Continuing, the court pointed out that the Union Pacific in turn induced the City of Kansas City, Kans., to undertake the development of such a market, which the city was to construct, operate and own. The opinion goes on to explain that the Union Pacific became interested in the development in order to increase the volume of its traffic, as it and the Missouri Pacific were the only roads serving the proposed site. Because business in the Greater Kansas City area was believed insufficient to support both the new market and the old market in Kansas City, Mo., says the court, the plan included taking steps to persuade dealers on the Missouri side to move to Kansas. It is also explained that the plan contemplated certain concessions and free rents by the city of Kansas City, Kans., to those who decided to make the shift.

"Ostensibly," declares the court, "this was to compensate the dealers for their costs of removal, but actually, at least in some instances, it went somewhat beyond.

(*Continued on page 1026*)

Murray Latimer Is Optimistic

Wants to wait and see instead of taking actuaries' advice on boosting pension tax

Because he does not think that railroad payrolls over a long period of years will be as low as they were in 1938 and 1939, or that railroad employees will retire as fast as they did in those years, Murray W. Latimer, chairman of the Railroad Retirement Board is not personally convinced that payroll taxes under the Carriers' Taxing Act would have to be increased to 11 per cent in order to sustain the benefits provided under the Railroad Retirement Act. Mr. Latimer made this statement in the course of his discussion of proposed appropriations for the Board's activities for the fiscal year ended June 30, 1942, when he appeared recently before a subcommittee of the House of Representatives committee on appropriations.

Funds for the Board are carried in H. R. 4926, the so-called Department of Labor-Social Security Appropriation Bill which was reported to the House this week; testimony taken by the sub-committee was made public when the bill was reported. The 11 per cent rate referred to by Mr. Latimer came from the report of the Board's actuarial advisory committee, issued sometime ago; the actuaries held that experience during the period covered by its survey showed that the taxes would have to be on that basis to sustain the benefits. The present pension tax, paid half by the carriers and half by the employees, is six per cent; and it will rise to 7.5 per cent by 1946.

The bill as reported carries a total of $144,000,000 for the Retirement Board as compared with a budget estimate of $144,019,770 and an appropriations totaling $125,136,000 for the current fiscal year ending June 30, 1941. The committee report, submitted to the House by Representative Tarver, Democrat of Georgia, chairman of the sub-committee, said that the committee "has had some difficulty in understanding the budget schedules of positions requested for the operation of the Board in the next fiscal year because of the fact that part of the expenses of the Board are paid by direct appropriation from the Treasury and another part of the expenses are met by a permanent appropriation from the unemployment insurance administration fund." Because "a confused procedure" is thus presented the committee suggests that in the preparation of the budget estimates for the next fiscal year "the appropriation should be set up on a functional basis and the over-all cost of both funds shown in the budget tabulations."

Also, the committee recalled how its report last year had commented on the fact that the cost of administering the Unemployment Insurance Act had bten about 30 per cent of the disbursements under that act. It went on to note that during the first nine months of the current fiscal year this administration cost had been 17.2 per cent of disbursements; but the committee "feels that there is still opportunity for improvement . . . and will review the subject at the time of hearings on the bill next year."

Mr. Latimer's statement to the sub-committee was a review of the Board's activities and functions along with arguments in support of appropriations sought. The plan whereby the Board is paying railroads to gather prior service records of prospective annuitants under the Retirement Act accounted for some of the expected increase in fiscal 1942 expenses over 1941.

Among other things Mr. Latimer was questioned about the size of the Railroad Unemployment Insurance Fund, in which connection he was asked if some consideration should not be given to reducing the unemployment insurance tax which is paid entirely by the railroads. His reply was: "I think one of two things ought to be done. If it is deemed desirable that the benefits be made more liberal than they now are, I think you can defend the continuation of this tax. On the other hand I don't think you can defend a reduction of the tax until it is determined what the level of benefits should be. There are a good many points where the benefits perhaps are not as adequate as they should be."

Previously Mr. Latimer had been asked if he had observed any tendency on the part of employee organizations to demand larger benefits as the fund increased. In reply he recalled the passage last year of the liberalizing amendments to the Unemployment Insurance Act, adding: "I think that was quite justified, because the original level of benefits under the Railroad Act was decidedly lower than that of the States until last year."

Erie Rate Department to Move to N. Y.

The rate section of the Traffic department of the Erie, heretofore headquartered at the Midland building, Cleveland, Ohio, is expected to move to 50 Church street, New York, on or about August 1. The move will affect approximately 40 officers and employees under Assistant Vice-President L. B. Burford.

Conductors Elect New Head

The Order of Railway Conductors, on May 30, elected H. W. Fraser of Cedar Rapids, Ia., president to succeed J. A. Phillips, who will retire on August 1. Mr. Fraser, an employee of the Atchison, Topeka & Santa Fe, has served as senior vice-president for the last year. F. H. Nemitz of Tucson, Ariz., was elected senior vice-president.

A. C. L. Cuts Time of Florida Coach Train

The Atlantic Coast Line sliced 45 min. from the running time of its northbound West Coast "Tamiami Champion"—summer coach and Pullman train from Florida to New York—effective June 1. The 45-min. reduction was made on the schedule of the train between St. Petersburg, Fla., and Jacksonville. The train now leaves St. Petersburg at 12:40 p. m. instead of 12:01, arriving in Jacksonville at 8:20 p. m., instead of 8:25.

Foresees Ample Steel for Cars

Budd "assumes" that requisite materials will be provided—A. A. R. considers wood

In urging railroads to order cars liberally, the Transportation Division of the Office for Emergency Management has assured the carriers that "the importance of transportation is well recognized," and thus "it must be assumed the necessary materials for an adequate car program will be provided," said a May 31 statement from Commissioner Ralph Budd. This reassurance came after Mr. Budd had recognized that delays because of the inability of car builders to obtain sufficient steel "has been discouraging to some builders because they reason that if material cannot be provided for this year's program of car building, there would be no point in undertaking a larger production."

"Obviously," he went on, "all of our defense efforts must be integrated if we are to be fully successful. There is no point in producing an increased volume of defense materials if such materials cannot be transported from where they are to where they are needed." Meanwhile the Association of American Railroads had put out a May 29 announcement revealing that the Mechanical Division would undertake an immediate investigation of the possibilities of substituting wood for steel in the superstructure of freight cars. The investigation, launched upon instructions from A. A. R. President J. J. Pelley, "is a result of uncertainty and possible delay in obtaining sufficient steel for freight cars which will be ordered by the railroads after completion of the cars now on order."

Other recent developments in connection with the steel situation have been the second report to President Roosevelt on the adequacy of the steel industry for national defense by Gano Dunn, special consultant of the Production Division, Office of Production Management; and the general steel preference delivery order issued May 29 by E. R. Stettinius, Jr., director of the Division of Priorities, OPM. Generally, Mr. Dunn's report estimates that steel production will fail by 1.4 million tons in 1941 and by 6.4 million tons in 1942 to meet requirements both for military and civilian uses. However, the report has this to say: "There is no question of lack of steel for national defense. The grand total of all the Army, Navy, Maritime Commission and other military requirements, plus all out aid of every kind for Britain, is less than 25 per cent of the industry's capacity. The only question is whether there shall be any curtailment of the other 75 per cent allocated to civilian requirements. The amount of these estimated for 1942 is nearly 50 per cent greater than the consumption in 1939."

Mr. Stettinius' general steel preference delivery order is designed "to give defense needs and essential civilian needs first call on all forms of steel." It would appear to be an intermediate step toward mandatory priorities on steel; the announcement called it "a further step in the Priorities Divi-

(Continued on page 1023)

4 Months N. O. I. Tops 1930 Figure

3.85 per cent return compares with 3.51 per cent in first third of that year

Class I railroads of the United States in the first four months of 1941 had earnings [net railway operating income] of $254,072,100, before interest and rentals, according to the Bureau of Railway Economics of the Association of American Railroads. This was at the annual rate of return of 3.85 per cent on their property investment. The corresponding earnings in the first four months of 1940 were $150,024,090 or 2.3 per cent, and in the same period in 1930, they were $233,942,444 or 3.51 per cent.

CLASS I RAILROADS—UNITED STATES

Month of April

	1941	1940	1930
Total operating revenues	$375,008,369	$321,567,097	$445,523,063
Total operating expenses	274,938,371	245,877,517	344,194,247
Operating ratio—per cent	73.32	76.46	77.26
Taxes	36,546,224	30,727,479	29,495,407
Net railway operating income (Earnings before charges)	52,568,880	34,120,523	60,882,332
Rate of return on property investment	3.07%	2.01%	3.61%

Four Months Ended April 30

Total operating revenues	$1,527,115,220	$1,307,932,859	$1,761,623,106
Total operating expenses	1,082,825,989	992,488,059	1,370,341,285
Operating ratio—per cent	70.91	75.88	77.79
Taxes	147,825,333	122,242,627	116,253,004
Net railway operating income (Earnings before charges)	254,072,100	150,024,090	233,942,444
Rate of return on property investment	3.85%	2.30%	3.51%

The net railway operating income for April was $52,568,880, or 3.07 per cent, compared with April, 1940's $34,120,523 or 2.01 per cent and April, 1930's $60,882,332 or 3.61 per cent.

Gross revenues in the first four months of 1941 totaled $1,527,115,220, compared with $1,307,932,859 in the same period in 1940, and $1,761,623,106 in the first four months in 1930, an increase of 16.8 per cent in 1941 above 1940, but 13.3 per cent below 1930. Operating expenses amounted to $1,082,825,989, compared with $992,488,059 in the corresponding period in 1940, and $1,370,341,285 in the same period in 1930—9.1 per cent above the former but 21 per cent below 1930.

Class I roads in the four months paid $147,825,333 in taxes, compared with $122,242,627 in the same period in 1940, and $116,253,004 in 1930. For April alone, the tax bill amounted to $36,546,224, an increase of $5,818,745 or 18.9 per cent above April, 1940. Fourteen Class I roads failed to earn expenses and taxes in the four months, of which seven were in the Eastern district, one in the Southern district, and six in the Western district.

Operating revenues for April totaled $375,008,369 compared with $321,567,097 in April, 1940, and $445,523,063 in April, 1930; operating expenses totaled $274,938,371 compared with $245,877,517 in the same month of 1940, and $344,194,247 in April, 1930.

Class I roads in the Eastern district had earnings in the first four months of $131,125,471, before interest and rentals, a return of 3.7 per cent; in the first third of 1940, their corresponding earnings were $96,738,463 or 2.77 per cent, and in the same period in 1930 they were $134,459,050 or 4.18 per cent. Gross in the Eastern district in the four months totaled $765,997,473, an increase of 15.1 per cent compared with same period in 1940, but a decrease of 13.7 per cent compared with the first four months in 1930; operating expenses totaled $536,490,528, an increase of 10.3 per cent above 1940, but a decrease of 21.1 per cent under 1930.

Class I roads in the Eastern district for April had earnings of $19,410,830, before interest and rentals, compared with $21,513,490 in April, 1940, and $37,110,656 in April, 1930.

The Southern district net in the four months was $44,214,661, or 3.94 per cent; in the same period in 1940, their corresponding earnings were $24,950,688, a return of 2.22 per cent, and in the same 1930 period they were $32,884,884 or 2.83 per cent. Southern district operating revenues in the four months totaled $215,538,864, an increase of 18.4 per cent compared with the same period in 1940, but a decrease of nine per cent under 1930. Operating expenses in the four months totaled $145,845,843, an increase of 6.8 per cent above the same period in 1940, but a decrease of 21 per cent under 1930.

Class I roads in the Southern district for the month of April had earnings of $9,564,206, before interest and rentals, compared with $5,427,372 in April, 1940, and $7,970,597 in April, 1930.

Class I roads in the Western district in the four months had earnings of $78,731,968, before interest and rentals, a return of 4.07 per cent; in the same period of 1940 their corresponding earnings were $28,334,939, or a return of 1.5 per cent, and in the corresponding period in 1930, they were $66,598,510 or 2.92 per cent. Gross in the Western district in the four months totaled $545,578,883, an increase of 18.6 per cent above the same period in 1940, but a decrease of 14.3 per cent below 1930. Operating expenses totaled $400,489,618, an increase of 8.4 per cent compared with the first four months in 1940, but a decrease of 20.8 per cent compared with the 1930 period.

For April the Class I roads in the Western district had earnings of $23,593,844, before interest and rentals, compared with $7,179,661 in April, 1940, and $15,801,079 in April, 1930.

Tells the I. C. C. Where to Head In

Senate committee takes over job of deciding whether to permit abandonment

Criticism of the policies of the present Denver & Rio Grande Western management respecting branch lines and advocacy of a standard-gage line to replace the present narrow-gage line featured the report of the special Senate interstate commerce subcommittee headed by Senator Johnson, Democrat of Colorado, which has been investigating the Interstate Commerce Commission's order authorizing the D. & R. G. W. to abandon its narrow-gage line from Antonito, Colo., to Santa Fe, New Mexico.

Division 4 of the commission originally permitted the abandonment of the 125.3-mile line on January 22, but because of the Senate investigation, the effective date of the order has been postponed so that it now becomes effective June 11 unless again further postponed.

The committee specifically recommends that the commission should deny the application "without further delay," but the report then goes on to say that the commission "should at least postpone permission to abandon this vital rail connection until the adverse effect on large areas of the southwest has been given further study and examination."

The report gets off to a flying start by saying that it was established beyond any doubt that, while the investment of the D. & R. G. W. is considerable in southern Colorado, the investment of shippers, producers, farmers, ranchers and townspeople is many times as great. "The evidence clearly indicated," declares the report, "that the railroad management has deliberately discouraged railroad traffic, both freight and passenger, by embargoes, rate discrimination, and extremely poor service and accommodations. It was proven at the hearing that the Denver & Rio Grande Western discontinued shipments of hogs from the San Luis Valley to California points via Santa Fe, and compelled such shipments to be routed via Pueblo and Salt Lake. This long haul required three feeds as against one feed via the Atchison, Topeka & Santa Fe, and at least 24 hours longer time in transit. Wool shipments to Boston were driven off this line by a 15-cent higher freight rate than that in force at competitive shipping points on the Atchison, Topeka & Santa Fe, a fact which absolutely compelled shippers to route their wool against their will over the A. T. & S. F. lines.

"The evidence strongly indicated that the D & R. G. W. made it a practice to subsidize with railroad funds and the free services of railroad officials, competing motorbus and truck service along all of its lines in southwestern Colorado and encouraged such competition in every way, but most effectively by arranging slower rail transportation schedules. Perishable local freight shipments to points on the Santa Fe branch were delayed until they rotted

—a most effective method to make it impossible to ship by rail."

The report goes on to say that the evidence indicated that the D. & R. G. W. has not solicited traffic from shippers in competitive territory, nor has it shown any interest whatsoever in rail shipments to or from its narrow-gage territory. "The obvious policy of organized and directed promotion of truck and bus competition," further declares the subcommittee, "the deliberate neglect and progressive curtailment of service on all of the D. & R. G. W. lines south and west of Pueblo, and south and west of Salida, Colo., must convince even the most optimistic of southern Colorado citizens that the present management will divest itself of every rail line other than its main line at the earliest possible opportunity. If that policy is to be checked it should be checked now by denying the pending application, and the actual situation should be understood by all of the people of southern Colorado and by the Interstate Commerce Commission."

The report next describes the construction of the D. & R. G. W., alleging that the management in years gone by did not like the Santa Fe and determined to build a connection to the west. "Unfortunately for all concerned," declares the report, "the directors began casting their eyes to a Salt Lake connection and a new line to the Pacific coast which had no economic justification for its construction. By this venture into the speculative, the D. & R. G. W. quickly became hopelessly involved in the high-finance operation and stock manipulation of the Western Pacific, which some 20 years ago wound up in bankruptcy and receivership."

After granting that due to the able management of the last few years much progress has been made towards solvency, the report goes on to assert that the management, "however able and alert it is, seems to be far more interested in converting the property into a trunk-line railroad, bridging eastern railroads entering Denver with Salt Lake connections, than it is with building up its whole system and giving southern and western Colorado good rail service."

It is further charged that the management does not desire rail connections with the Atchison, Topeka & Santa Fe. Nevertheless, says the report, the public interest in four states demands that this connection be continued.

"The public interest and general welfare of southwestern Colorado and the states of New Mexico, Arizona, and California," concludes the subcommittee's report, "demand that rail connections with the Atchison, Topeka & Santa Fe be maintained for the reason that this railway is an outstanding system and that the natural market for southern Colorado products lies to the southwest and on to the Pacific coast. The public interest further requires that the neglected and obsolete narrow-gage line with its miserable service between Antonito and Santa Fe be replaced by a broad-gage line which doubtless will result in very satisfactory business. The junction with the Denver & Salt Lake has brought a large volume of new traffic to the D. & R. G. W. because the new connection has made it the shortest rail line between Denver and Salt Lake City. If the Santa Fe branch be replaced with a broad-gage line, the D. & R. G. W. will have the shortest rail line between Denver and Santa Fe, N. Mex., and rail traffic will be stimulated thereby to the south just as it so recently has been stimulated to the west."

The report was signed by Senator Johnson, chairman, and Democratic Senators Schwartz of Wyoming and Chavez of New Mexico, and Republican Senator Shipstead of Minnesota. A footnote to the report reveals that Senator Chavez is not a member of the interstate commerce committee, but sat with the committee because of the interest of his constituents in the matter.

A. C. James, Railroad Builder, Dies

Arthur Curtiss James, developer of the West and organizer of a transcontinental railroad system, died in New York on June 4 at the age of 74. He had been confined to the hospital with pneumonia since May 30. Mr. James retired as chairman of the board and a director of the Western Pacific on November 4, 1939.

Club Meetings

Charles R. Busch, vice-president of the Unit Truck Corporation, will talk on "The Development and Application of Unit Trucks to Modern Freight Cars" before the Railroadians of America at the Pennsylvania Y. M. C. A., New York, on June 13 at 7:30 p. m.

Inspection, Disinfection and Cleaning of Cars

The House of Representatives on June 2 passed H. R. 4849 which would authorize the Secretary of Agriculture to promulgate rules and regulations governing the inspection, cleaning and disinfection of railway cars and other vehicles entering the United States from Mexico.

Would Prohibit Agreements on Passenger Services

Representative Magnuson, Democrat of Washington, has introduced H. R. 4929 which would amend the Interstate Commerce Act to prohibit agreements or understandings between common carriers with respect to "the character or frequency of, or the equipment to be used in," passenger service.

Record Ore Movement on Lakes

The greatest monthly movement of iron ore in the history of the Great Lakes—11,081,199 long tons—was carried by the lake cargo fleet during May, according to a June 2 statement from Ralph Budd, commissioner of the Transportation Division, Office for Emergency Management. The May traffic brought the total movement for this season to 18,035,000 long tons, as compared with 7,743,000 long tons during the corresponding period in 1940.

"This record transportation achievement," Mr. Budd said, "has been the result of advance planning and full cooperation on the part of all involved in the production and transportation of iron ore from the point of origin to final destination, including mining companies, railroads, the carriers on the Great Lakes, and governmental agencies such as the Coast Guard."

Meanwhile, President Roosevelt on June 2 signed H. R. 4632, the recently-enacted bill to permit vessels of Canadian registry to transport iron ore between United States ports on the Great Lakes during 1941. This legislation was urged by Mr. Budd's office so that the Canadian vessels may help out on this season's record movement.

Would Grant Special Excursion Rates to Selectees

Senator Brooks, Republican of Illinois, has presented to the Senate a resolution of the Illinois General Assembly asking Congress to enact legislation which would "permit or require" common carriers of passengers to offer special excursion round-trip rates to selectees between points of their encampment and their homes. The resolution calls for fares "commensurate with the ability of such persons to pay."

As noted in the *Railway Age* of April 19, page 693, the railroads have voluntarily established 1¼-cents-per-mile fares for uniformed men on furlough.

Shipping Officer Becomes L. M. S. Head

Sir Thomas Boyden, prominent officer in the steamship field in Great Britain, has been appointed chairman of the London Midland & Scottish, succeeding the late Lord Stamp, whose death by enemy bombs was reported in the *Railway Age* of April 26, page 733. Sir Thomas has been a director of the London Midland & Scottish since 1923 and deputy chairman since 1940. He has been a prominent figure in shipping circles for many years, having been chairman of the Liverpool Steamship Owners' Association, and president of the Chamber of Shipping of the United Kingdom.

Rebuilt Coaches for N. Y.-New Orleans Train

Modernized "luxury" coaches were placed in operation by the Southern and Norfolk & Western on the "New York, Chattanooga and New Orleans Limited," trains No. 41 and 42, in the latter part of May. The modernized cars are equipped with indirect fluorescent lighting, individually-controlled seat lights and reclining, rotating seats. The floors are of rubber tile, while the sidewalls are finished in three shades of green and the ceiling in ivory. Improved insulation which will deaden noises and vibration is included in the redesigned rolling stock.

W. A. Summerhays With OPM

W. A. Summerhays, formerly manager of the Forest Products Bureau, Illinois Central, with headquarters at Memphis, Tenn., has recently become associated with the Priorities Division, Office of Production Management, with headquarters at Washington, D. C.

He was loaned to OPM by the Associa-

tion of American Railroads, where he had been serving recently as assistant to C. H. Buford, vice-president, Operations and Maintenance Department. Meanwhile, Mr. Summerhays is also continuing his association with OPM's Purchases Division, where he has for several months been an adviser on matters relating to lumber.

Opposition to N. Y. & L. B. Speed-Up Plan

Proposed elimination of nine station stops on the New York & Long Branch on commuter trains to and from New York will not be put into effect because of unwillingness of several communities to give up their local station stops. The poll recently taken among regular commuters along the line (see last week's *Railway Age*, page 985) showed that more than two-thirds of the passengers in the affected area were in favor of the speed-up in running time which would have resulted from elimination of the stops. Naturally enough, residents of those towns which would have retained their stops under the plan were almost unanimously in favor of the proposal, while objectors were in a majority in the other towns along the road.

Conference Report on R. F. C. Bill

Conferees this week agreed on a report reconciling differences between the Senate and House versions of S. 1438 which would give the Reconstruction Finance Corporation new and sweeping powers to finance the defense program. As noted in the *Railway Age* of May 24, page 955, where passage of the bill by the Senate was reported, the R. F. C. would get authority to build and equip a railroad.

The conference report, filed in the House on June 3, restores that provision which stipulates that nothing in the bill shall be construed to authorize R. F. C. to take any action, directly or indirectly, with respect to the St. Lawrence Seaway, the Passamaquoddy project; the Florida Ship Canal; the Tennessee-Tombigbee Waterway; or a Nicaragua Canal. A similar provision adopted by the Senate had been stricken out by the House.

Congress Gets St. Lawrence Legislation

Legislation which would authorize President Roosevelt to carry out the United States-Canadian agreement with respect to the St. Lawrence power and seaway agreement was introduced in the House of Representatives this week by Representative Mansfield, Democrat of Texas, chairman of the House committee on rivers and harbors. The bill is H. R. 4927, and Mr. Mansfield announced that hearings before his committee will open on June 16. Meanwhile, President Roosevelt said at his June 3 press conference that he would probably send another St. Lawrence message to Congress the latter part of this week.

In introducing the bill, Representative Mansfield stated that his committee had before it several resolutions calling for inclusion of the St. Lawrence project in the forthcoming omnibus rivers and harbors bill. However, he thought it the better plan to have it considered separately—"owing to the issues involved . . . and the great public interest that has been manifested." At the hearings, he went on, representatives of the federal government and of the state of New York are expected to appear. He added that "representatives of the railways and other interested parties have advised me of their opposition."

Mr. Mansfield hopes to have "all material issues fully developed"; but "for obvious reasons, unnecessary duplications in the printed hearings will be guarded against insofar as practicable."

Claim Division to Hold Three-Day Program

The Freight Claim division, Association of American Railroads, will hold its fiftieth annual meeting at the Cosmopolital hotel, Denver, Colo., June 10 to 12, inclusive. Principal speakers will be Governor R. L. Carr of Colorado; Wilson McCarthy, trustee, Denver & Rio Grande Western, and president, Denver & Salt Lake; Holcombe Parkes, associate director of public relations of the A. A. R., and C. E. Johnston, chairman, Western Association of Railway Executives. Besides the addresses, features of the convention will include the presentation of committee reports and the election of officers and members of the general, appeal and arbitration committees. Parks C. Archer, of Chicago, chairman of the division and general claim agent of the Alton, will preside.

Supreme Court Refuses Review of Red Cap Case

The United States Supreme Court has refused to review a Fifth Circuit Court of Appeals decision holding that tips may be counted as wages in compliance with the Fair Labor Standards Act. The petition asking for certiorari was filed in the Supreme Court by red caps working in the Dallas, Tex., union terminal and by the Solicitor General on behalf of General Philip B. Fleming, administrator of the Wage and Hour Division, Department of Labor.

As pointed out in last week's issue, the Fifth Circuit Court of Appeals had found that tips received by red caps constituted wages paid to them, thus reversing the judgment of the court below which had found in favor of the red caps and awarded them $77,753 in back pay and liquidated damages.

No Determination Yet on Transport's Place in Defense Set-Up

President Roosevelt said at his June 3 press conference that he had made no decision as to the place which the Transportation Division of the Advisory Commission to the Council of National Defense should occupy in the new defense set-up which has emerged with the creation of the Office of Production Management and the Office of Price Administration and Civilian Supply. The Transportation Division, now generally referred to as the Transportation Division, Office for Emergency Management, is the only remaining unit of the Advisory Commission.

As noted in the *Railway Age* of April 19, page 696, President Roosevelt said at that time that he was having studies made with a view to determining where the transportation phase of the defense program would logically fit into what the President called the larger picture which has unfolded in OPM and OPACS. Meanwhile the White House last week denied published reports to the effect that the President had approved a plan for merging the Transportation Division into a new Office of Transportation.

Vacations With Pay

The National Mediation Board was continuing this week its mediation meetings with labor and management representatives in connection with the demand of 14 non-operating unions for vacations with pay. As usual no information as to the status of the proceeding was available at offices of the Board.

Chairman George A. Cook of the Mediation Board was asked about the vacations-with-pay case when he testified recently before a sub-committee of the House committee on appropriations on the bill carrying the Board's appropriations for the fiscal year ending June 30, 1940. The testimony, made public this week, showed that Mr. Cook told a questioner as to the prospects for settlement that "we are hopeful we will be able to work it out." The case has been in mediation since March 19.

Non-Transportation Unions Want 30 Per Cent Wage Increase

Wage increases which will add about 30 per cent or $400,000,000 to the payroll of non-transportation employees of the railways will be demanded by the 14 Non-Transportation Unions on June 10. Decision to seek increases in pay was made at a meeting of general chairmen of the 14 Brotherhoods at a meeting at Chicago on June 4. According to a statement made by the 14 Brotherhoods, they will open their existing wage agreements with the railways throughout the United States for the purpose of making such changes in wages as may be necessary to provide for a minimum wage of 70 cents per hour at the lowest rate to be paid in the industry and with other corresponding increases which will provide rates up to $1.15 per hour for the highly skilled workers in railroad service. The railways will be asked to make the new rates effective as of July 10, 1941.

Emergency Board Mediates Ore-Dock Employees Wage Dispute

The emergency board appointed by President Roosevelt on May 9 to investigate the wage dispute involving approximately 800 ore-dock employees of four railroads at Duluth, Minn., turned its hand to mediation and has effected a settlement of the controversy. The agreement will give the employees an increase of 10 cents per hour, from 62½ cents to 72½ cents; they were demanding a 12½-cents-per-hour raise.

The men involved are employees of the Duluth, Missabe & Iron Range, Chicago & North Western, Great Northern, and Minneapolis, St. Paul & Sault Ste. Marie; they were represented by the Brotherhood of Railway Clerks. Members of the emergency board were: Arthur E. Whittemore, attorney of Boston, Mass.; G. Stanleigh Arnold, attorney of San Francisco, Calif.

and William H. Tschappat, of Falls Church, Va., retired major general and former chief of army ordnance.

Retirement Board Survey for OPM

The Office of Production Management has requested the Railroad Retirement Board to determine the number and the occupational skills of persons in various crafts who are on furlough lists or are working less than full time in the railroad industry. With the cooperation of the standard railway labor organizations and of the Association of American Railroads, the Board made such a survey for the week of May 12-18, 1941. The study is expected to furnish information which may be useful in meeting future labor shortages in defense industries.

The Board's employment service operated at a much higher level in April than in any preceding period, due mainly to the seasonal demand for track labor and the cooperation of employers in using the facilities of the Board in preference to private employment agencies and commissaries. As an aid in recruiting track labor, a hiring hall was established in Chicago in a vicinity where employees of this type usually congregate. The employment offices were notified of 4,892 openings, of which 1,073 were with non-railroad employers. A total of 7,097 qualified employees were referred to available vacancies and 2,600 were placed.

Loss and Damage Claims Increase

Freight loss and damage payments made by the railroads of the United States and Canada in 1940 totaled $21,059,149, an increase of 11.5 per cent over the preceding year, according to the Freight Claim Division of the Association of American Railroads.

The rise in such claims, it was pointed out, was in line with the increase in the volume of transportation, particularly of manufactured products. Loss and damage payments last year were 0.57 per cent of the gross freight revenue of Class I roads as compared with 0.56 per cent in 1939. It was said by G. W. Loderhose, of Chicago, chairman of the Division's Committee on Prevention of Loss and Damage, that the railroads will take immediate steps to intensify their drive against this economic waste.

"There is more opportunity for errors when shippers and transportation companies are working under high pressure and increasing business," Mr. Loderhose declared. "Therefore, plans are being formulated for greater supervision in all phases of freight handling, from the shipping room to the receiving room. This will include special methods of educating the personnel, a large number of whom are new. Special studies are also being made of loading methods to apply to the many articles to be used in national defense, the most important of which represents a wide variety of machinery products that must be handled promptly and safely. This will be emphasized in all its ramifications, and lends double importance to the joint shipper-carrier perfect shipping and careful handling campaign."

For many years, Mr. Loderhose added, the railroads have waged war on waste until, as a result of better methods of packing, loading and handling of shipments, loss and damage to freight has been reduced to less than one-fourth of what it was 20 years ago.

Crandall Becomes Director of I. C. C. Bureau of Accounts

C. D. Crandall, assistant director of the Interstate Commerce Commission's Bureau of Accounts since August, 1938, has been appointed director to succeed Frank S. Fowler, whose retirement on May 31 was noted in last week's issue.

Mr. Crandall, who has been connected with the Bureau of Accounts at different times since 1914, began his career in December, 1896, in station service with the

C. D. Crandall

Spokane Falls & Northern, subsidiary of the Great Northern, at Northport, Wash. Two years later he transferred to the auditor's office of that road at Spokane, Wash., where he remained until November, 1904, rising through various positions to that of chief clerk to the auditor. Next Mr. Crandall became cashier and chief clerk in the accounting department of the Great Northern Steamship Company at Seattle, Wash., a position from which he resigned in March, 1907, to become chief accountant to the engineer in charge of construction of the Copper River & Northwestern at Kattala and Cordova, Alaska.

Remaining in Alaska until December, 1908, Mr. Crandall then returned to Seattle, where he was associated until March, 1911, with the tax department of the Oregon-Washington; there he was in charge of renting and maintaining Seattle and Tacoma property which had been purchased by the Oregon-Washington for the construction of terminals in those cities. In March, 1911, he became auditor of the Bellingham & Northern at Bellingham, Wash., resigning at the close of 1913 to begin in January, 1914, his first period of service with the I. C. C. as examiner in the Bureau of Accounts. Mr. Crandall remained in that position until June, 1918, when he became an assistant in the office of the Director of Finance, United States Railroad Administration. Eight months later in February, 1919, he resumed his position of examiner in the Bureau of Accounts, remaining until May, 1920, when he resigned to accept a position as auditor for the railroad department of the Pierce Oil Company, St. Louis, Mo. A few months later, in September, 1920, Mr. Crandall returned to the commission's service as an assistant in the Bureau of Finance; and he was assistant director of that Bureau from May, 1922, until May, 1924.

At the latter time Mr. Crandall again left the commission to become comptroller of the Manila Railroad Company at Manila, P. I. He resigned from that position in November, 1930, and in March, 1931, he became chief accountant in the Report Section, Bureau of Accounts. He has since remained with that Bureau, serving in the Report Section's chief-accountant position until July, 1934, and as field supervisor of accounts from that time until he became assistant director in August, 1938.

Fifty-first Annual Meeting of Railway Accounting Officers

The June 24-26 meeting of the Accounting Division, Association of American Railroads, at the Cosmopolitan Hotel, Denver, Colo., will comprise the fifty-first annual meeting of railway accounting officers, according to the Agenda which is now being distributed. As usual the meeting will be a three-day affair, following the day (June 23) given over to meetings of the principal committees.

The principal address of the June 24 session will be delivered by W. M. Jeffers, president of the Union Pacific. This opening session will also be addressed by the Division's chairman—T. H. Seay, comptroller of the Southern—and by E. H. Bunnell, vice-president of the Association of American Railroads in charge of the Finance, Accounting, Taxation and Valuation Department. At the June 25 session, A. H. Reeder, auditor of freight accounts, Florida East Coast, will speak on "Arbitration—A Constructive Force in Human Relationships." At the closing session on June 26, James G. Lyne, financial editor of *Railway Age*, will talk about "Trends in Transportation, and What Analysts Can Do to Improve Them." Also at that session the annual election of officers will be held.

The Agenda, a 295-page document, contains reports of the Division's various standing committees, dealing with more than 260 individual subjects.

Advisory Boards to Hold Special Meeting

The National Association of Shippers Advisory Boards will hold a special meeting at Chicago on June 19, to discuss prospective transportation needs for the remaining months of 1941. Highlights of the morning session will be addresses by Ralph Budd, transportation commissioner of the Advisory Commission to the Council of National Defense, and John J. Pelley, president of the Association of American Railroads. Carl Giessow, secretary of the national shippers' organization and director

of the Traffic Bureau of the St. Louis Chamber of Commerce, will present a report, and the general chairman and contact committee chairmen of the 13 regional boards will give their views concerning the transportation needs in their respective territories.

Following a luncheon, William H. Day, a vice-president of the national association and manager of the Transportation Department of the Boston Chamber of Commerce, and Warren C. Kendall, chairman of the A. A. R. Car Service Division, will analyze the reports of the various boards. Charles H. Buford, of Washington, D. C., vice-president of the operations and maintenance department of the A. A. R., will then speak on "A Cooperative Job to Be Done." The intercoastal and coastwise situation will be described by G. H. Shafer, a vice-president of the national association and general traffic manager of the General Timber Service, after which George C. Randall, manager of Port Traffic of the A. A. R., will summarize conditions at the ports.

How maximum utilization of transportation facilities can be obtained will be jointly discussed by Charles Donley, Pittsburgh traffic counsellor and former president of the organization, and M. J. Gormley, executive assistant of the A. A. R. C. J Goodyear, of Philadelphia, general chairman of the Atlantic States Shippers Advisory Board and traffic manager of the Philadelphia & Reading Coal & Iron Company, will submit a resolution pledging shipper co-operation with the railroads to the end that there will be sufficient equipment to meet transportation demands.

Freight Car Loading

Loadings of revenue freight for the week ended May 31, which included the Memorial Day holiday, totaled 801,783 cars, the Association of American Railroads announced on June 5. This was a decrease of 64,234 cars, or 7.4 per cent, below the preceding week, but an increase of 162,663 cars, or 25.5 per cent, above the corresponding week last year and an increase of 238,474 cars, or 42.3 per cent, above the comparable 1939 week.

Loading of revenue freight for the week ended May 24 totaled 866,017 cars, according to the Association of American Railroads. This was an increase of 4,740 cars, or six-tenths of one per cent above the preceding week, an increase of 178,537 cars or 26 per cent above the corresponding week in 1940, and an increase of 242,475 cars or 38.9 per cent above the comparable 1939 week.

The summary, as compiled by the Car Service Division, A.A.R., follows:

Revenue Freight Car Loading

For Week Ended Saturday May 24

Districts	1941	1940	1939
Eastern	185,311	147,241	131,361
Allegheny	192,399	146,208	121,527
Pocahontas	58,261	48,244	41,766
Southern	122,711	99,341	90,909
Northwestern ..	134,695	108,831	99,833
Central Western	118,784	94,634	95,350
Southwestern ..	53,856	42,981	42,796
Total Western Districts	307,335	246,446	237,979
Total All Roads	866,017	687,480	623,542
Commodities			
Grain and grain products	40,130	29,432	33,910
Live stock	10,429	10,506	10,706
Coal	151,878	116,951	96,242
Coke	13,732	8,971	4,834
Forest products	41,718	34,667	29,759
Ore	76,601	59,071	43,670
Merchandise l.c.l.	162,254	148,909	152,859
Miscellaneous .	369,275	278,973	251,562
May 24	866,017	687,480	623,542
May 17	861,227	679,065	612,888
May 10	837,149	680,628	554,644
May 3	794,301	665,547	572,025
April 26	721,702	644,804	585,190
Cumulative Total, 21 Weeks ...	15,534,508	13,378,462	12,136,538

In Canada.—Carloadings in the week ended May 24 (which included a holiday) totaled 57,242, as compared with 61,737 in the previous week and 49,919 last year, according to the compilation of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
May 24, 1941	57,242	29,232
May 17, 1941	61,737	30,232
May 10, 1941	61,566	29,966
May 25, 1940	49,919	24,693
Cumulative Totals for Canada:		
May 24, 1941	1,172,875	607,882
May 25, 1940	1,013,302	515,949
May 27, 1939	894,483	446,019

Railroads Will Meet Defense Needs

The railroads will provide adequate rail transportation right through the defense emergency, Robert S. Henry, assistant to the president of the Association of American Railroads assured the convention of Purchasing Agents at Chicago on May 29. "An average of more than 5,000 carloads a day of defense materials have been delivered to 144 widely separated defense camps, plants and projects," he said, "and export freight has flowed through the ports in volumes approaching those of the war year of 1918, at times. The railroads also have handled more than 1,000,000 members of the armed forces, moving on more than 2,000 special trains and thousands of regular trains, without interfering with regular operations."

Mr. Henry cited benefits obtained from thorough co-operation with the nation's shippers and receivers of freight, a situation which did not exist in the first World War when, "as a result of efforts to expedite shipments by placing on the cars the 'government priority' tags supposed to secure for them priority, there came a time when yards were so full of tagged cars that no one could tell which priority had priority over all the other priorities."

There will be occasions, Mr. Henry said, when the railroads will not be able to furnish every shipper precisely the type of car he will want on a given day, but there will be no car shortage.

As for the added burden which the railroads may have to shoulder because of possible diversion of intercoastal traffic through the Panama Canal, he estimated that this tonnage could be moved by rail with some 20,000 cars, and in the event all traffic now moving through the canal is diverted to rail, not more than 35,000 additional cars would be required.

Answering a question at the meeting as to whether the railroads will be in position

to prevent a shortage of fuel oil on the eastern seaboard, Mr. Henry said that the roads are not engaging in oil transportation to a substantial degree, and that the oil companies themselves are dominant in oil haulage, to the extent that they own their own tank cars. He estimated that there are approximately 20,000 surplus tank cars, but this is only enough to move about a third of the oil formerly moved by boat.

Emergency Board Reports A. B. & C. Strike Settled

Settlement of a dispute over demands for "standard basic wages" by some 375 train and yard service employees of the 640-mi. Atlanta, Birmingham & Coast was announced on May 30 by Dr. George W. Stocking, chairman of an Emergency Board appointed on May 15 by President Roosevelt as a fact-finding body. Dr. Stocking declared that an accord had been reached by the union representatives and the management and that details are now being worked out. At time of writing, the Emergency Board had not yet filed a report at the White House nor had the National Mediation Board at Washington been advised of the terms of settlement.

A national officer of the Brotherhood of Locomotive Firemen & Enginemen stated, however, that the agreement granted a substantial pay increase and the establishment of a schedule of rules similar to those in force on other railroads in the region. The union representative declared that wages of employees in lower brackets have heretofore been 40 per cent under those paid as standard on other roads. Terms of the settlement, he estimated, would bring them to 18 to 19 per cent under standard.

The Emergency Board was named by President Roosevelt on May 15 to avert a strike called for 6 A. M., May 17, by the B. of L. F. & E. and the Brotherhood of Railroad Trainmen. The board held formal hearings in Atlanta, Ga., May 21 to May 24, inclusive, and met in deliberative sessions May 26 to May 29, inclusive.

Dr. Lloyd Wilson Heads OPACS Unit Transportation

Creation of a Transportation Unit in the Office of Price Administration and Civilian Supply has been announced by Leon Henderson, administrator. Heading the unit will be Dr. Lloyd Wilson, University of Pennsylvania economist, assisted by John H. Eisenhart, attorney, and John Simpson, rate expert. Both Mr. Eisenhart and Mr. Simpson were formerly with the Maritime and Interstate Commerce Commissions.

The unit, the announcement said, "will continue the work undertaken by OPACS to avert unjustified increases in transportation costs as typified by its participation in the intercoastal lumber case decided recently by the Interstate Commerce Commission." In the intercoastal case OPACS opposed an effort on the part of steamship companies transporting lumber from the Pacific coast to Atlantic and Gulf ports to increase freight rates from $16 to $17 per thousand board feet of lumber. OPACS action was based on the contention that such a rate increase "would substantially increase the cost of the defense building program and would contribute to a threatened price spiral. The position was taken that transportation rate increases should not be allowed during the national emergency unless clearly warranted by operating conditions."

The intercoastal lumber case referred to was I. & S. Docket No. 4895 which had come over from the Maritime Commission to the I. C. C. after the enactment of the Transportation Act of 1940. It was recently decided by Division 3 with Commissioner Mahaffie dissenting. The majority found that the proposed increases had not been justified because the proponents had failed to sustain the burden of proof which the law places upon them. Dissenter Mahaffie on the other hand thought the proposals had been justified. He pointed out that the increases were not protested by any producer or shipper of lumber—"the opposition was primarily by government representatives." He conceded that undue increases in commodity prices should be restrained, but he nevertheless insisted that the commission's standard "is a transportation standard."

Foresees Ample Steel for Cars

(*Continued from page 1017*)

sion's program, which began early this year, to facilitate the delivery of steel products promptly for all defense requirements." It was also adopted by the Office of Price Administration and Civilian Supply "as the basis for its program for the equitable allocation of steel among competing civilian needs, after satisfaction of military defense requirements."

"Under the new order," the announcement went on, "any customer who by his own efforts has been unable to obtain satisfactory placing or delivery of his orders for steel, can make a sworn statement of his difficulties to the Priorities Division. The Priorities Division, if the case seems justified, will then require the supplier involved to make a sworn statement explaining why the order was rejected or deferred. Upon the basis of this information, the Division will take whatever priority action is necessary to fill defense and essential non-defense needs for steel." Meantime on May 31 the Priorities Division announced that copper had been added to the list of "vital defense materials under mandatory, industry-wide control." Other metals now under like control include aluminum, magnesium, nickel, nickel-steel and ferrotungsten.

Among other findings, the aforementioned Dunn report on steel capacity stated that prospective deficits in Great Lakes transportation capacity forecast in the first report have been avoided. Under his "Transportation Capacity" heading Mr. Dunn now says: "On the basis of estimates of the Lake Superior Iron Ore Association and of Mr. J. J. Pelley, president of the Association of American Railroads, obtained through Mr. Ralph Budd, commissioner for Transportation in the Advisory Commission to the Council of National Defense, and through other sources, I concluded in the first report that the Great Lakes facilities were adequate to bring down 84,000,000 net tons of ore during the season of 1941. This figure has met with wide criticism as being too optimistic and beyond the capacity of the facilities. A great deal of fresh attention has been given to the subject by Mr. Budd and others, with the result that confidence in the 84,000,000 ton figure has been established, and there is a probability that, barring strikes and disasters, the 84,000,000 ton figure will be exceeded, enabling the accumulation of a stock pile to guard against contingencies and serve as a reserve against demands next year.

"Further reports from Mr. Budd warrant the forecast of a substantial increase that will become effective for 1942. Five new large ore carriers are under construction, but while two of these are expected to be ready in the middle of the 1942 season, three of them will probably not be ready before its close, if then, when their opportunity to contribute to increased transportation capacity will not be great. Based on a rate of shipment actually accomplished this year, Mr. Budd's estimate for next year is 75,000,000 long tons with the present facilities; 1,500,000 long tons by the addition of the Canadian vessels . . . and 500,000 long tons by the new ore carriers in the latter part of this season. This makes a total of 77,000,000 long tons or 86,240,000 short tons as a measure of the ore transportation capacity for the 1942 season. I have an estimate from another source, which puts the capacity of the Canadian vessels at 2,000,000 long or 2,240,000 short tons. If this should be valid, it would increase the 1942 ore transportation capacity to 87,800,000 short tons. I am, however, using Mr. Budd's figures and not taking advantage of the higher estimate."

Mr. Budd also referred to the Great Lakes ore situation in his May 31 statement, saying: "To meet the needs of the steel industry, transportation of ore on the Great Lakes has been geared to a tempo which utilizes 100 per cent of existing cargo carrying facilities. To augment the American fleet, the cooperation of Congress was sought in the passage of legislation which will enable the use of Canadian boats in our ore traffic. Congress responded favorably and quickly to this request. Ore movements on the Great Lakes for this season are 9,300,000 gross tons ahead of the corresponding period in 1940."

Previously, as it led up to its aforementioned comment on the supply of steel for freight cars, Mr. Budd's statement had noted that "no instances of delays to defense work for lack of transportation have been brought to this office." In other words, as Mr. Budd put it, "The inland transportation systems of the country—railroads, trucks, pipe lines, Great Lakes carriers, and inland waterways carriers—have successfully met all traffic demands resulting from the constantly expanding defense program and those connected with civilian needs as well."

Continuing, the transportation commissioner spoke of the freight-car situation, predicting that during the fall peak this year there will be 1,615,000 serviceable cars, and only about five per cent bad orders. He pointed out that this will mean the addition of 100,000 new cars between the peak traffic period of 1940 and that of

1941, and went on to mention the railroad industry's plans to increase ownership by another 120,000 cars by the fall of 1942 and by a further 150,000 by 1943's peak. The latter figure, Mr. Budd said, "is of course subject to revision."

Another recent statement from Mr. Budd's office endorsed the call for heavier loading which has been made by W. C. Kendall, chairman of the Car Service Division, as noted in the *Railway Age* of May 31, page 989. "Heavier loading," said that statement, "provides an opportunity for all concerned in the use of railroad transportation—railroads, shippers, and receivers—to add substantially to the volume of transportation which can be performed by available railroad equipment . . . Under present condition, with a rising tide of traffic which undoubtedly will, during peak periods, result in some tightness of car supply, the benefits of heavier loading to all concerned are more important than they have been since the heavy traffic years, 1926 and 1929. The Transportation Division urges upon shippers and receivers the desirability, in their own interest, of full cooperation in promoting capacity utilization of railroad equipment."

In the same connection field agents of the Interstate Commerce Commission have been keeping on the alert to promote more efficient utilization of equipment. However, it was stated at the commission that there was nothing particularly unusual in such a situation, since that is the normal role of the field agent in times of large demands for transportation.

Fire Destroys Part of Erie Terminal Property

A fire which originated in the stockyards at Jersey City, N. J., on the evening of May 31 spread to adjoining facilities of the Erie, resulting in the total destruction of a grain elevator owned by the Long Dock Company—an Erie subsidiary, Erie railroad shed No. 2, two old Erie barges and a pile driver; and in the partial destruction of a modern warehouse leased by the road to the Mid-Hudson Company, covered platforms formerly used for handling milk and some 18 freight cars in South Side yard. At times the conflagration—which raged for 24 hrs.—threatened the passenger station itself, which serves all New York traffic of the road. Service was suspended, however, for only an hour on Saturday evening during the worst of the fire.

For the present the Erie has placed in effect temporary embargoes on grain and livestock for lighterage. The latter type of traffic was handled for the road by the Jersey City Stockyards Company as agent, the facilities of which are a total loss.

The Memorial Day week-end fire followed by only four days "a fairly serious" conflagration on a 2,000-ft. open pier of the Pennsylvania at Greenville, N. J., on the morning of May 27, some three miles to the south. Although most of 50-odd freight cars were pulled off the structure by switching crews before injury, about 20 were damaged.

House Gets Cole Pipe Line Bill

The transportation phase of the petroleum shortage situation on the east coast due to a lack tanker tonnage because of recent tanker transfers to Britain came sharply to the fore this week in Washington. On Capital Hill the House interstate and foreign commerce committee favorably reported out with minor amendments Representative Cole's (Democrat of Maryland) bill, H. R. 4816, which would give broad powers both to government agencies and to private companies to condemn private land for the construction of oil and gasoline pipe lines. Details of the measure were given in the *Railway Age* of May 24, page 962.

Meanwhile, at the other end of Pennsylvania Avenue Secretary of the Interior Ickes, who, during the past week was named by President Roosevelt as federal coordinator of petroleum for national defense, lashed out at the railroads for what he termed their "very shortsightedly" attempts to block pipe line construction in the southeastern states. The petroleum coordinator also declared that the carriers were trying to wave a wand and produce some 32,000 tank cars, but that this was a rather difficult process in view of the fact that the cars did not exist.

Mr. Ickes also told reporters that the problem of an oil shortage on the east coast was strictly one of transportation and that he foresaw a possibility of restricted use in that area. In this connection he advocated oil pipe lines from the south to the east, and went on to say that he favored priorities on materials used in constructing pipe lines and oil tankers to hasten their construction.

At the same time Representative Cole, in testifying before the House rules committee in support of a rule for consideration of his bill, said that he had heard rumors that there might be more transfers of tankers to Britain in the near future.

April Accident Statistics

The Interstate Commerce Commission on June 4 made public its Bureau of Statistics' preliminary summary of steam railway accidents for April and this year's first four months. The tabulation, which is subject to revision, follows:

Item	Month of April		4 months ended with April	
	1941	1940	1941	1940
Number of train accidents	587	490	2,614	2,439
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	185	130	514	487
Injured	153	155	506	489
Passengers on trains:				
(a) In train accidents*				
Killed	...	25	4	26
Injured	67	70	399	293
(b) In train-service accidents				
Killed	4	...	4	1
Injured	136	116	551	521
Travelers not on trains:				
Killed	...	1	1	3
Injured	61	69	307	314
Employees on duty:				
Killed	35	38	199	179
Injured	1,678	1,264	6,543	5,932
All other nontrespassers:**				
Killed	115	135	681	711
Injured	418	391	2,284	2,260
Total—All classes of persons:				
Killed	339	329	1,403	1,407
Injured	2,513	2,065	10,590	9,809

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than $150 to railway property.

** Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties *for all classes of persons, including both trespassers and nontrespassers,* were as follows:

Persons:				
Killed	108	117	632	654
Injured	287	284	1,659	1,717

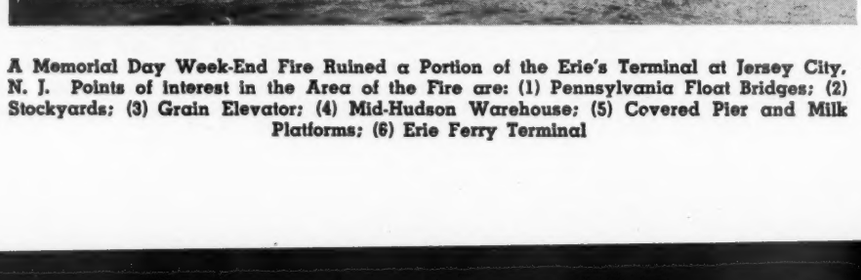
Would Give Total Power to President

The chairmen of the Senate and House military affairs committees, respectively, Senator Reynolds, Democrat of North Carolina, and Representative May, Democrat of Kentucky, have introduced in the Senate and House companion measures, S. 1579 and H. R. 4949, bills which would give the President the power during any period of national emergency to requisition all types of property having anything to do with national defense and to use and dispose of such property.

A more sweeping grant of power is difficult to imagine, and, although the bill was introduced at the request of the War Department and with the approval of the Navy Department and the Office of Production Management, it now appears that determined opposition to this broad grant of power will make itself known in both houses of Congress.

Included in the grant of power is the authority to take over all forms of transportation, including the railroads if the President should see fit to do so. The bill provides that if an owner is not satisfied with the settlement proposed by the government, he shall be paid 75 per cent of the amount determined by the President and may sue for the balance at any time within two years. There is no time limit placed on this grant of power, according to the terms of the measure.

Questioned at his June 3 press conference regarding the need for the bill, President Roosevelt said that he was not



A Memorial Day Week-End Fire Ruined a Portion of the Erie's Terminal at Jersey City, N. J. Points of Interest in the Area of the Fire are: (1) Pennsylvania Float Bridges; (2) Stockyards; (3) Grain Elevator; (4) Mid-Hudson Warehouse; (5) Covered Pier and Milk Platforms; (6) Erie Ferry Terminal

familiar with the specific provisions of the measure, but that it was intended to facilitate the taking over by the government of plants if labor and management found themselves unable to agree on labor disputes.

Meanwhile, the May 28 issue of the Congressional Record contains some four pages of fine type setting out the various powers which the President may exercise during a national emergency.

Object to I. C. C. Manual Block Rules

The Association of American Railroads and the American Short Line Railroad Association have requested permission to present testimony before the Interstate Commerce Commission in objection to Sections 704 and 705 of the I. C. C. Rules, Standards and Instructions for the Installation, Maintenance and Repair of Manual Block Signal Systems, which now read as follows:

"704. The limits of each block shall be properly designated and marked, and means shall be provided by signal indication or prescribed form to convey to a train about to enter a block information concerning conditions affecting the use of the block."

"705. Each railroad company shall establish rules which will provide that a passenger train shall not be admitted to a block which is occupied by another train and a train shall not be admitted to a block which is occupied by an opposing train or by a passenger train, except under flag protection; and a train other than a passenger train shall not be permitted to follow a train other than a passenger train into a block except when authorized by train order, permissive signal or prescribed form, and when such movement is so authorized the following train shall be permitted to proceed only with caution prepared to stop short of train or obstruction."

The railways' objections are based on the grounds that: These sections contain requirements which the Commission is without authority to impose upon the railways; They go far beyond their purported subject matter, namely, standards intended to govern the installation, inspection, maintenance, and repair of manual block signal systems; They go beyond the subject matter of Section 25 of the Act in that they relate and pertain directly to the matter of railroad train operation and only incidentally and indirectly, if at all, to the matter of installation, inspection, maintenance, or repair of block signal systems; The sections are unnecessary and undesirable in the interest of safety, economy, and efficiency of railroad train operation and are impracticable of application. They are designed for universal application, whereas the circumstances and conditions affecting train operation vary so widely on different railroads, and in many instances on different parts of the same railroad, as to make impracticable the control of such operations by uniform operating rules. The railways contend further that enforcement of the rules contained in these sections would result in delaying and hampering train operations and in adding to the hazards thereof, while, at the same time, both greatly reducing their efficiency and materially increasing their cost; and that the language of the sections is indefinite and uncertain, and would inevitably lead to misunderstanding and controversy.

Hearings on General Rate and Classification Probes

Initial hearings in connection with the Interstate Commerce Commission's general investigations of the class rate structure and the consolidated freight classification have been set for July 10 at St. Louis, Mo., for the purpose of offering in evidence four studies which have been prepared by members of the commission's staff. The announcement of the hearings, which will be held before Division 2, came in a June 4 notice to parties of record in the proceedings which are docketed as No. 28300, and No. 28310.

The studies which "have not been considered by the commission or a division thereof" are: Natural Resources of the Freight Rate Territories of the United States, by W. H. S. Stevens, assistant director, Bureau of Statistics; Cost of Performing Railroad Freight Service in the Various Rate Territories for 1939, including Cost Scales by Territories and Types of Equipment, by F. K. Edwards, principal economist (transportation cost), Bureau of Statistics; Progression in Freight Rate Mileage Scales Prescribed by the Commission, by E. S. Hobbs, statistical analyst, Bureau of Statistics; and Some Suggestions for Improvements in Railroad Class Rates, by C. G. Jensen, assistant to director, Bureau of Traffic. No evidence other than that relating to the studies will be received at the July 10 hearing.

As described briefly in the commission's notice the Stevens report is a comprehensive study of the distribution of the natural resources of the United States among freight rate areas. The areas considered as freight rate territories are Official, Southern, Western Trunk Line, Southwestern, and Mountain-Pacific. Five major types of resources are recognized: Mineral, energy, agricultural, forest, and human. Under each of these topics there are numerous subdivisions, and the percentage distribution of the amount of each of the resource items among the several territories is summarized. "The report does not attempt to show to what extent the freight rates of each area are associated with the natural resources within its boundaries. The information given may be regarded as background material for the broad study of the freight rate structures."

Railroad Freight Service Costs in the Various Rate Territories, prepared under the direction of Mr. Edwards, gives for each rate territory a series of distance cost scales, showing what it cost in 1939 per hundred pounds to carry freight by railroad for varying distances in various types of cars and with varying net loads in the car. There is a description of the formula used and a discussion of the special problems that had to be solved in applying the formula. The report is in two volumes, the first containing the textual discussion and appendices, and the second the cost scales.

The Hobbs study of Progression in Freight Rate Mileage Scales was issued as information in August, 1940. It reviews the construction of over 170 distance rate scales prescribed at various times by the commission and gives the percentage relation of rates at the even 100-mile distances to the rate at the next lower 100-mile distance. It is found that the progression in the existing scales is not uniform. After smoothing out irregularities, the percentages representing the progression in each scale are consolidated into a composite class rate scale and a composite commodity rate scale. These are found so nearly alike as to progression that they are finally consolidated into one general composite scale. The report does not recommend new rate scales but merely describes existing practice in rate scale construction.

Finds Labor Act Requires System-Wide Elections

Reporting after investigation and formal hearing in a case involving yardmen employed by the New York Central, the National Mediation Board has reaffirmed its previous conclusion that the Railway Labor Act gives it no discretion to split a single carrier or combine two or more carriers for the purpose of determining who shall be eligible to vote for a representative of a class or craft of employees. The case arose out of a dispute between the Brotherhood of Railroad Trainmen and the Switchmen's Union of North America, the former contending that yardmen on all N. Y. C. lines constitute a single undivided unit entitled to designate a representative for purposes of the Railway Labor Act.

That contention, upheld in the Board's decision, was contested by the Switchmen's Union, which has represented yardmen in the service of the N. Y. C. on some of its component lines or roads and at some of its yards. The proceeding is docketed as Case No. R-690, and the effect of the decision is to reaffirm the conclusions reached by the Board in its first annual report for the fiscal year ended June 30, 1935, as follows:

> What is a carrier?—Although the term "carrier" is clearly defined in the Act, questions have arisen in connection with representation disputes which made it necessary for the Board to interpret its meaning. Where a railroad system is composed of a number of subsidiary corporations, employees have been in dispute as to whether one vote should be taken of a craft on the whole system or whether the subsidiary corporations are carriers within the meaning of the Act whose employees are entitled to separate representation. The Board has ruled generally that where a subsidiary corporation reports separately to the Interstate Commerce Commission, and keeps its own pay roll and seniority rosters, it is a carrier as defined in the Act, and its employees are entitled to representation separate from other carriers who may be connected with the same railroad system. If the operations of a subsidiary are jointly managed with operations of other carriers and the employees have also been merged and are subject to the direction of a single management, then the larger unit of management is taken to be the carrier rather than the individual subsidiary companies.

Applying the foregoing to the present case the Board concluded: "Since the New York Central and all of its operated subsidiaries, including the Boston & Albany, the Cleveland, Cincinnati, Chicago & St. Louis, the Michigan Central, and the Toledo & Ohio Central, is a single carrier within the meaning of and subject to the

Interstate Commerce Act as established by the Interstate Commerce Commission, and so also constitutes a single carrier for the purposes of the Railway Labor Act, all of the employees of any given craft or class . . . must therefore be taken together as constituting the proper basis for determining their representation in conformity with Section 2, Ninth, of the Railway Labor Act." Accordingly, the case was remanded to the mediator to settle the representation dispute with a vote on the foregoing basis.

Seemingly the Trainmen will win a system-wide election, the report having cited from the Switchmen's Union brief statements to the effect that the B. R. T. "is well aware that it controls a clear majority of all of the yardmen of the System"; and that the proceeding is "an effort of one standard labor organization to oust another similar organization from a jurisdiction long held by it and honorably exercised."

Motor Act Interpretations

The Interstate Commerce Commission in a recent decision has found that the Transportation Act of 1940's amendments to the Motor Carrier Act's definitions of common and contract carriers "were not intended to and did not change the basic conception upon which they were based originally, or place any given carrier after the amendment in a class different from that in which he would have fallen before the amendment." The finding came in a report by Division 5 on reconsideration of No. MC-5724, N. S. Craig Contract Carrier Application.

In another decision by Division 5 in No. MC-2511, Ziffrin Incorporated Contract Carrier Application, the commission has held that the Motor Act provisions prohibiting dual common and contract carrier operations (except "for good cause shown") applies where two affiliated corporations, under common control and management, claim both common and contract carrier operations between the same points in the same territory.

In the Craig case, the commission affirmed its previous finding that the applicant who "had no apparent reluctance to enter into an unlimited number of contracts" was a common carrier. Summarizing its discussion of what constitutes a contract carrier the commission said: "In order to qualify as a contract carrier by motor vehicle . . . one must, in addition to serving under 'individual' contracts with shippers, provide a definitely special service designed to meet the peculiar needs of a particular shipper or a limited number of shippers as distinguished from the common needs of shippers generally. As the degree of physical specialization which is practiced or proposed diminishes, it must, if the contract-carrier status is to be preserved or achieved, be replaced by greater specialization with respect to shippers, reaching, possibly, to the point of rigid devotion to a single shipper."

Commissioner Lee, concurring, agreed that Craig was a common carrier, but he did not approve the majority's conclusions with respect to the distinction between common and contract carriers. "The real distinction between them," Mr. Lee said, "is in the holding out to serve the general public by the former and the absence of such holding out by the latter." Moreover, he thought the 1940 amendments changed the original definitions "by emphasizing the lack of any authority on our part to convert a contract carrier into a common carrier by mere administrative action."

In the Ziffrin case, the application for a contract-carrier permit was denied because of the applicant's tie-up with Ziffrin Truck Lines, Inc. Commissioner Lee, concurring in part, cited a previous case wherein the commission had allowed affiliated common and contract carrier companies 90 days in which to get divorced. He saw no reason why Ziffrin should not have the same sort of privilege as an alternative to denial of the application.

Craig's operations are between points in Illinois, Indiana, Kentucky, Michigan, Missouri, Ohio, and Pennsylvania. The Ziffrin companies operate between points in Indiana, Ohio, Illinois and Kentucky.

Roosevelt Asks $125,000,000 for Emergency Roads

President Roosevelt has sent a message to Congress asking that it authorize the appropriation of $100,000,000 for assisting in the development of access roads and $25,000,000 for the strengthening of bridges in military, naval and industrial areas. At the same time Senator Hayden, Democrat of Arizona and chairman of the Senate committee on post offices and post roads, has offered in the Senate S. 1580, a bill which he described as one "to carry out the general purpose" of the President's request; Representative Cartwright, Democrat of Oklahoma and chairman of the House committee on roads, has introduced a companion measure, H. R. 4935.

The $125,000,000 request of the President compares with the sum of $287,000,000 recommended in a special report by the Public Roads Administration submitted to President Roosevelt on February 13 by Federal Works Administrator John M. Carmody, details of which were given in the *Railway Age* of February 22, page 362.

Referring to a survey of the country's highway facilities from the standpoint of national defense which the President had requested Mr. Carmody to make nearly a year ago, Mr. Roosevelt told Congress that at the time of its completion, it indicated that there were 204 areas in which access roads and highway bridges in military, naval and industrial areas were of the utmost importance.

"It is estimated," the President wrote in his special message, "that the cost of providing this type of facility in the 204 areas will aggregate $177,600,000 and will involve 2,594 miles of highways. Means have been found for financing the construction of about 1,090 miles at a cost of $54,400,000, leaving 1,504 miles of the original program costing $123,200,000 to be financed. It is estimated that 100 additional areas have become involved and that the overall cost of providing these facilities will now reach a figure of $350,000,000."

The President went on to say that the work thus far had been financed by the Works Projects Administration, by federal-aid highway funds, and by contributions of counties and states, but that it was his hope that readjustments in highway programs now authorized may release additional funds for meeting in part these new requirements.

The message also revealed that the Federal Works Agency had estimated that $458,000,000 would be required as a minimum for strengthening the entire strategic network of highways of more than 75,000 miles. The President felt that there is no immediate need for undertaking such an extensive program and that some progress is being made in this work under the normal highway program. However, Mr. Roosevelt did feel that there was an immediate need for strengthening certain bridges over which the Army will move its heavy equipment.

The President also told Congress that any appropriations made for access roads should be available for use only in areas certified by the War and Navy Departments or the Office for Emergency Management. No attempt should be made, he continued, to apportion funds for access roads in the manner in which funds are apportioned under the Federal Highway Act.

High Court Rules On K. C. Produce

(*Continued from page 1016*)

Throughout the promotion, financing and leasing of the new market facilities, Union Pacific took a leading and dominant part." The Interstate Commerce Commission, joined by four other railroads and the city of Kansas City, Mo., sought and obtained a permanent injunction against the making of any payments to merchants to move to Kansas City, Kans. The case was then appealed directly to the Supreme Court.

After discussing the operation of the Elkins Act in detail, Justice Reed proceeds to an examination of the injunction. "Where, as here," he writes, "the action of the City in giving cash and rental credits is, as we have decided, a part of a plan in respect to transportation resulting in an advantage to shippers, we conclude that the giving of any cash, rental credit, free or reduced rents to induce leasing of space in the Terminal is contrary to the Elkins Act. Even if we assume that nothing will be given except the actual costs of removal, the receipt of those costs would put the shipper in a preferred position to all other shippers using the facilities of an interstate carrier who did not receive such concessions. The act condemns any device 'whereby any other advantage (than lower tariffs) is given. . . .'"

The injunction also provided that the rates for space shall be such "which will yield a proper rate of return upon the full value of the market facilities as a whole, after making provision for all expenses of operation, including maintenance and depreciation" Produce dealers and their agents are also prohibited from being tenants of the terminal at rental rates which are not adequate to yield the required amount. The court felt that this was erroneous and ordered that the above-quoted

words should be stricken out and the injunction amended by inserting the following: "which is fair rental value for the facilities occupied." The court believed that fair rental value rather than a compensatory return upon the full value of the market facilities is the standard by which the city's schedule of rates should be judged.

Defending the action of the city of Kansas City, Kans., Justice Roberts, in his dissent, declared that "until the present time no one has supposed that a third party who is neither carrier nor shipper and neither furnishes nor receives a transportation service, in making a business deal with a man who happens to be a shipper over an interstate carrier's line, may render himself liable criminally if, and merely because, the result of his transaction will be beneficial when reckoned up in the year's profit and loss statement of the other party to the transaction."

"The ruling here is much broader," continues Justice Roberts, "and does not condition violation of the law on any payment or concession by Union Pacific. It is that if the city, which is not a shipper, nor a carrier, and not a furnisher of any transportation service, in dealing with its own property not devoted to any service of transportation, sees fit to make an advantageous financial arrangement with a proposed tenant of its property that transaction, otherwise legal, at once becomes illegal and subjects the city, or its officers, to criminal penalties and to an injunction if it happens that the party with whom it deals becomes, in virtue of the transaction, a shipper over the lines of an interstate carrier, and is benefitted by the transaction. The distinction sought to be made between benefits applicable to transportation and benefits generally seems to me illusory. The court expressly holds that intent is immaterial; that if the result is advantageous to the shipper a rebate, concession, or discrimination from the tariffs of the carrier has been accomplished within the meaning of the Elkins Act.

"I venture to think that no one will be more surprised than the members of the Congress at the attribution to the statutory phrase 'every person' who gives or receives, grants or solicits rebates or discriminatory service to states and municipal corporations and their officers who, in promoting lawful municipal purposes, incidentally bring additional business to an interstate carrier. We know that it is a common practice for chambers of commerce and city authorities to offer to manufacturing and business concerns lands and sites on favorable terms, such as low purchase price, reduced rentals, exemption from taxation for a given period, in an effort to induce such concerns to locate within the limits of a municipality."

"Thus," concludes Justice Roberts, "the decree will render it impossible for Kansas City to make what it deems legitimate and proper arrangements for the prosecution of a business enterprise in no sense consisting of the service of transportation. It seems clear that Congress never had any such intent in adopting the Elkins Act. This is to reach into the peculiarly local affairs of the states and to lay the dead hand upon the otherwise lawful activities of states and their subdivisions."

Supply Trade

George I. Wright, who has heretofore represented the **Coppus Locomotive Equipment Company,** Worcester, Mass., among Eastern railroads, has been appointed to represent this company on railroads having general offices in the states of Ohio, Indiana, Illinois, Michigan, Wisconsin, Nebraska, Iowa, and Minnesota. Mr. Wright was formerly with the Reading, Illinois Central and Southern Pacific railroads.

Samuel T. Pryor, formerly assistant to the president of the **American Brake Shoe & Foundry Co.** and vice-president and director of the Southern Wheel Division of that company, has been elected vice-president and assistant to the president of the Pan-American Airways Corporation. Mr. Pryor had been associated with the American Brake Shoe & Foundry Company for 17 years.

OBITUARY

Robert M. Peterson, assistant advertising manager of the American Steel & Wire Co., died suddenly on May 30 at Scottdale, Pa.

Harry S. Hart, president of the Rodger Ballast Car Company, Chicago, who died on May 27, as reported in the *Railway Age* of May 31, was born at Clinton, Ia., on September 2, 1870. After graduating from Rose Polytechnical Institute, Terre Haute, Ind., in 1893, he entered the employ of the Siemens & Haske Electric Co. as a construction engineer and six months later resigned to become eastern manager

Harry S. Hart

of the Crouse-Tremaine Carbon Company at New York. In 1899 he became associated with the Rodger Ballast Car Company and in 1900 was promoted to secretary. Two years later he was advanced to vice-president and general manager and in 1906 was elected president. At the time of his death he was also president of the National Dump Car Company. When business no longer required his entire attention he devoted himself to civic improvements. He was also interested in the arts and languages and studied painting and French literature.

Construction

CANADIAN PACIFIC.—A contract for a one-story machine shop at Calgary, Alta., has been awarded the Poole Construction Co., Ltd., Edmonton, Alta. The building will occupy an area of 90 ft. by 160 ft. and will have a steel frame and brick walls. Two repair tracks will extend through the building and a 20-ton overhead crane and a drop pit table will be installed. The approximate cost of the building will be $95,000.

CHICAGO & NORTH WESTERN.—A contract has been awarded Fairbanks, Morse & Co., Chicago, for the construction of a new wood coal chute at Proviso Yard in Chicago. The new coal chute will use an existing foundation and replace a former wood coal chute. The cost of the work will be approximately $29,000.

NORTHERN PACIFIC.—The State of Idaho has awarded a contract amounting to $172,601 to Sather & Sons, Seattle, Wash., for a concrete and steel railroad bridge for the Northern Pacific over the Coeur d'Alene-Yellowstone Trail highway near Post Falls, Idaho. The bridge will provide clearance for a four lane highway beneath.

PENNSYLVANIA. — This company has awarded contracts to the Ellington Miller Company of Chicago for construction of an extension to the company's enginehouse at 55th street, Chicago, and to the Fritz-Rumer-Cook Company of Columbus, Ohio, for extension of tracks in the eastward yard at Columbus.

PENNSYLVANIA. — To provide for the prompt and efficient handling of the rapidly increasing movement of outbound and inbound freight at York, Pa., due to national defense activities and the growth of general business, this company will begin at once the work of more than doubling the capacity of its freight yard located north of Windsor Avenue, York, Pa. Eight new tracks will be built beside the existing ones, increasing the capacity of the yard from 142 cars to 350 cars. The enlarged yard will serve as a classification and concentration point for all carload shipments to and from the Frederick Branch, as well as those originating in the York district proper. Construction will begin immediately, and will include the laying of 11,250 feet of tracks, 10,000 cubic yards of grading, and the relocating of the high potential electric power lines along the railroad right of way.

SOUTHERN.—A drop pit and inspection pits for Diesel locomotives, and an extension to the tank shop are being constructed by the company forces at Chattanooga, Tenn. The cost of the work will be approximately $34,500.

THE UNITED STATES ARMY, Quartermaster, Carlisle Barracks, Pa., is asking for bids on June 10 for the construction of approximately 800 ft. of railroad siding at the Carlisle Barracks—Inv. 190-42.

Equipment and Supplies

Orders for Cars Continue Heavy

101 locomotives, 32 passenger cars and 19,221 freight cars ordered in May

Continuing preparations to insure the adequacy of their rolling stock to meet the increasing heavy demands of railroad traffic, the carriers placed orders in May for a total of 19,121 freight cars, topping by 3,030 the 16,091 cars placed in the preceding month of April—which in turn had represented the largest monthly volume in the current upswing in freight car buying that began in June of last year. The government purchased an additional 100 cars, making a total of 19,221 cars ordered, or the largest volume of any single month in the period January, 1929, to date, the current base period of *Railway Age* equipment comparisons, excepting December, 1936, when 23,052 cars were ordered. Equipment purchases for domestic service reported in the *Railway Age* during the month of May and comparisons with the preceding month of April and the corresponding month last year follow:

May Orders Compared

Locomotives	May 1941	April 1941	May 1940
Steam	28	1	..
Diesel-electric	73	67	26
Electric	..	..	1
Total locos.	101	68	27
Freight cars	19,221	16,091	1,734
Passenger cars	32	33	16

Of the 101 locomotives ordered in May, the railroads purchased 85, comprising 22 steam and 63 Diesel-electric and the United States Government the remaining 16, comprising 6 steam and 10 Diesel-electric. The 63 Diesel-electric units purchased by the railroads included three of 5,400 hp.; five of 4,000 hp.; two of 2,000 hp.; thirteen of 1,000 hp.; 26 of 600 or 660 hp. and 14 of less than 600 hp. All 10 units purchased by the federal government were of less than 600 hp. The 19,221 freight cars ordered were divided 16,867 to car builders and 2,354 to the railroads' own shops. Purchases were chiefly of box cars, 16,200 of the total ordered being of that type.

Outstanding locomotive orders in May included twenty 4-6-6-4 type freight locomotives by the Union Pacific; sixteen Diesel-electric units, including three 5,400 hp. freight locomotives and thirteen switchers by the Denver & Rio Grande Western; eleven Diesel-electric units, including five 4,000 hp. freight and passenger locomotives and six switchers by the New York, New Haven & Hartford; and ten Diesel-electric switchers by the Reading. Large rolling stock purchases included 4,100 cars by the Southern, 3,000 by the New York Central, 2,250 by the Union Pacific, and 2,000 by the Atchison, Topeka & Santa Fe. The Southern also purchased 25 baggage-express cars, the Erie 7 express cars and the Denver & Rio Grande Western 4 streamlined rail-motor cars.

Equipment Orders—First Five Months

Significant totals and comparisons of equipment orders for the first five months are as follows:

Locomotives:	First 5 Months 1941	1940	Increase
Steam	153	73	80
Diesel-electric	356	134	222
Electric	11	1	10
Total locos.	520	208	312
Freight cars	62,760	9,268	53,492
Passenger cars	360	42	318

Domestic Equipment Orders Reported in Issues of The Railway Age in May 1941 (Excluding May 3)

LOCOMOTIVES

Date	Name of Company	No.	Type	Builder
May 10	Reading	4	Diesel-electric Sw.	Electro-Motive Corp.
		2	Diesel-electric Sw.	American Locomotive Co.
		4	Diesel-electric Sw.	Baldwin Locomotive Works
May 17	Steelton & Highspire	2	Diesel-electric Sw.	General Electric Co.
May 17	East Erie Commercial	1	Diesel-electric Sw.	General Electric Co.
May 17	Arcade & Attica	1	Diesel-electric Sw.	General Electric Co.
May 17	Wabash	1	Diesel-electric Sw.	American Locomotive Co.
May 17	Minneapolis, St. Paul & Sault Ste. Marie	1	Diesel-electric Sw.	General Electric Co.
May 17	Denver & Rio Grande Western	1	Diesel-electric Sw.	General Electric Co.
May 17	Missouri & Illinois Bridge & Belt	1	Diesel-electric Sw.	General Electric Co.
May 17	Texas Pacific-Missouri Pacific Terminal R. R. of New Orleans	1	Diesel-electric Sw.	American Locomotive Co.
May 17	Alabama, Tennessee & Northern	1	Diesel-electric Sw.	General Electric Co.
May 17	New York, New Haven & Hartford	5	Diesel-electric Frt. & Pass.	American Locomotive Co.
		6	Diesel-electric Sw.	General Electric Co.
May 17	U. S. War Dept.	5	2-8-2	American Locomotive Co.
		8	Diesel-electric Sw.	General Electric Co.
May 24	Denver & Rio Grande Western	3	Diesel-electric Frt.	Electro-Motive Corp.
		4	Diesel-electric Sw.	American Locomotive Co.
		9	Diesel-electric Sw.	Baldwin Locomotive Co.
May 24	U. S. Navy Dept.	2	Diesel-electric Sw.	H. K. Porter Co.
May 31	Union Pacific	20	4-6-6-4	American Locomotive Co.
May 31	Conemaugh & Black Lick	2	0-8-0 Sw.	Lima Locomotive Works
May 31	Kansas City Southern	2	Diesel-electric Pass.	Electro-Motive Corp.
		2	Diesel-electric Sw.	Electro-Motive Corp.
May 31	U. S. Interior Dept. (Alaska R. R.)	1	4-8-2	Baldwin Locomotive Works
May 31	Nashville, Chattanooga & St. Louis	2	Diesel-electric Sw.	American Locomotive Co.
		2	Diesel-electric Sw.	Baldwin Locomotive Works
		2	Diesel-electric Sw.	Electro-Motive Corp.
May 31	Boston & Maine (Portland Terminal Company—B. & M. and M. C. Affiliate)	4	Diesel-electric Sw.	Electro-Motive Corp.
		2	Diesel-electric Sw.	American Locomotive Co.

FREIGHT CARS

Date	Name of Company	No.	Type	Builder
May 10	Atlantic Coast Line	700	Automobile	American Car & Foundry
		300	Furniture	Mt. Vernon
		200	HS Gondola	Bethlehem Steel Co.
		100	Cov. Hopper	Bethlehem Steel Co.
May 10	New York Central	10	Well	Despatch Shops
May 10	U. S. Government	50	Tank	American Car & Foundry
		50	Flat	American Car & Foundry
May 10	Wisconsin Central	150	Box	Pullman-Standard
May 10	Minneapolis, St. Paul & Sault Ste. Marie	250	Box	Pullman-Standard
May 10	Chicago & North Western	500	Box	American Car & Foundry
		500	Box	Pullman-Standard
May 10	Kansas City Southern (Louisiana & Arkansas)	50	Automobile	Pullman-Standard
		200	Box	Pullman-Standard
		75	Hopper	Pullman-Standard
May 17	New York Central	3,000	Box	Despatch Shops
May 17	Southern	1,900	Box	Mt. Vernon
		500	Flat	Mt. Vernon
		100	MT Gondola	Mt. Vernon
		1,500	Box	Pullman-Standard
May 17	Boston & Maine	4	Depressed Center	Company Shops
May 17	Missouri Pacific	100	Auto Parts	American Car & Foundry
May 17	Lehigh & New England	15	HB Cement	American Car & Foundry
May 17	Southern Pacific	4	Flat	Mt. Vernon
May 24	Delaware & Hudson	300	Twin Hopper	American Car & Foundry
		200	DE Gondola	American Car & Foundry
		50	Cov. Hopper	American Car & Foundry
May 24	Union Pacific	2,000	Box	Company Shops
		250	Automobile	Company Shops
May 24	Baltimore & Ohio	100	Caboose	Company Shops
May 24	Detroit, Toledo & Ironton	50	Cov. Hopper	Greenville Steel Car
May 24	Denver & Rio Grande Western	500	Box	Pressed Steel Car
		3	Flat	Company Shops
May 31	Nashville, Chattanooga & St. Louis	500	Box	Pullman-Standard
		300	Gondola	Pullman-Standard
May 31	Wabash Car & Equipment Co.	10	Cov. Hopper	American Car & Foundry
May 31	Atchison, Topeka & Santa Fe	2,000	Box	Pullman-Standard
May 31	Southern	100	Cement	Greenville Steel Car
May 31	Baltimore & Ohio	1,000	Box	Pullman-Standard
May 31	Lehigh & New England	100	Cov. Hopper	American Car & Foundry
May 31	Kansas City Southern	200	Box	Pullman-Standard
May 31	Maine Central	400	Box	Magor Car Corp.
		100	Twin Hopper	Bethlehem Steel Co.
May 31	Boston & Maine	200	Box	Magor Car Corp.
		500	Gondola	Bethlehem Steel Co.
		100	Twin Hopper	Bethlehem Steel Co.

PASSENGER-TRAIN CARS

Date	Name of Company	No.	Type	Builder
May 17	Southern	25	Baggage-Express	St. Louis Car
May 31	Erie	7	Baggage-Express	American Car & Foundry

	First Five Months Locomotive Orders			
	Steam	Diesel	Elec.	Total
Railroads	142	253	11	406
Industrial	5	35	..	40
U. S. Gov't. ...	6	68	..	74
Total	153	356	11	520

The large volume of locomotive and freight car orders placed in the first five months of this year exceeds the volume placed in any corresponding five months in the 1929-1941 cycle. The 62,760 freight cars ordered, 46,780 from car builders and 15,980 from the railroads' own shops, were divided as follows:

39,598 box
10,334 hopper
8,645 gondola
1,385 refrigerator
1,579 flat
300 stock
685 caboose
234 others

The current upswing in railroad equipment buying began in June of last year and, with the close of May, totals for the first 12 months of the program are now available. During the year ended May 31, orders were placed for 989 locomotives, 118,363 freight cars and 602 passenger-train cars —representing increases of 545 locomotives, 61,863 freight cars and 350 passenger-train cars over the corresponding 12 months ended May 31, 1940. The volume of freight cars ordered during the period is greater than the number ordered in any calendar year in the 1929-1941 cycle and the number of locomotives ordered is exceeded only by the 1,230 ordered in 1929. Equally significant is the continuing deluge of inquiries. At the close of May, the *Railway Age* had reported unfilled inquiries by the carriers alone for 40 large steam locomotives, 41 Diesel-electric units and more than 19,000 freight cars.

LOCOMOTIVES

THE CLINCHFIELD is inquiring for ten 4-6-6-4 type steam locomotives.

THE NEW YORK CENTRAL has ordered 15 4-8-2 type freight locomotives from the American Locomotive Co.

FREIGHT CARS

Northern Pacific Buys 2,200 Cars

The Northern Pacific has placed orders for a total of 2,200 freight cars as follows:

1,500 box cars—American Car & Foundry Co.
200 ballast cars—American Car & Foundry Co.
500 box cars—Pullman-Standard Car Manufacturing Co.

Great Northern Buys 2000 Cars

The Great Northern has ordered 2,000 40-ft. 6-in. wooden sheathed box cars of 50 tons' capacity, placing 1,000 with the Pullman-Standard Car Manufacturing Co. and 500 each with the Pressed Steel Car Co. and the General American Transportation Corp. Inquiry for this equipment was reported in the *Railway Age* of May 31.

THE WABASH is inquiring for 1,000 double-sheathed box cars of 50 tons' capacity.

THE UNION PACIFIC order for 2,000 50-ton box cars and 250 automobile cars reported in the *Railway Age* of May 24 as placed with company shops for 1941 delivery—should be corrected to read for 1942 delivery.

THE READING is negotiating with the Bethlehem Steel Co. for the purchase of 500 gondola cars of 70 tons' capacity.

THE MAINE CENTRAL has ordered ten covered hopper cars of 70 tons' capacity from the American Car & Foundry Co.

THE DELAWARE & HUDSON has placed an order for 35 container cars of 70 tons' capacity with the American Car & Foundry Co.

THE ERIE has ordered five 50-ft. 90-ton all-steel heavy duty flat cars with wood floors from the Greenville Steel Car Co. The inquiry for this equipment was reported in the *Railway Age* of May 24.

THE LEHIGH & NEW ENGLAND has ordered 300 steel hopper coal cars of 50 tons' capacity from the Pressed Steel Car Co. The inquiry for this equipment was reported in the *Railway Age* of May 17.

THE WESTERN PACIFIC has ordered 350 40-ft. 6-in. box cars of 50 tons' capacity and 300 50-ft. flat cars of 50 tons' capacity from the Mt. Vernon Car Manufacturing Co. Inquiry for this equipment was reported in the *Railway Age* of April 26.

THE CHICAGO, ROCK ISLAND & PACIFIC has placed an order for 800 40-ft. 6-in. box cars of 50 tons' capacity with the Pressed Steel Car Co. Inquiry for this equipment was reported in the *Railway Age* of May 31.

THE MISSOURI PACIFIC has ordered 1,050 freight cars as follows:

50 70-ton covered hopper cars—Mt. Vernon Car Mfg. Co.
200 50½-ft. 50-ton automobile cars—Mt. Vernon Car Mfg. Co.
800 40½-ft. 50-ton box cars—American Car & Foundry Co.

Inquiry for this equipment was reported in the *Railway Age* of May 10.

THE LEHIGH VALLEY has placed orders for a total of 1,000 freight cars as follows:

500 65-ft. gondola cars—Bethlehem Steel Co.
400 40-ft. 6-in., 50-ton box cars—Pressed Steel Car Co.
100 50-ft. 6-in., 55-ton auto-box cars—American Car & Foundry Co.

This company was first reported as expecting to enter the market for this equipment in the *Railway Age* of May 10.

THE WESTERN MARYLAND has placed orders for a total of 725 freight cars as follows:

200 40-ft. 6-in. steel sheathed box cars—Pressed Steel Car Co.
300 31-ft. steel hopper cars—Bethlehem Steel Co.
200 52-ft. 6-in. steel drop-end gondola cars—Greenville Steel Car Co.
25 50-ft. welded steel flat cars with wood floors —Greenville Steel Car Co.

Inquiry for this equipment was reported in the *Railway Age* of May 24.

PASSENGER CARS

THE CHICAGO RAPID TRANSIT COMPANY (elevated railway) is asking for prices on 4 three-compartment articulated passenger units which it will operate in test service and 250 units of the same type which it plans to purchase after the 4 sample units have been tested. The units, consisting of three car bodies each, will be operated individually or in trains on the elevated railway and through the Chicago subway.

SIGNALING

THE GREAT NORTHERN has placed an order with the General Railway Signal Company for a centralized traffic control machine having 14 levers, together with the necessary switch machines, to be installed at Hillyard, Wash., to remotely control from the depot the switch machines and signals at each end of the yard. The installation replaces existing mechanical interlocking at the west end of the yard.

THE LOUISVILLE & NASHVILLE has placed an order with the General Railway Signal Company covering materials for the installation of NX electric interlocking at Latonia, Ky., on the Cincinnati division. The machine, to be placed in the passenger depot, will control the junction of the double-track main line from Cincinnati, Ohio, to Corbin, Ky.; the single-track main line to Louisville, Ky.; and also a single-track branch line to Newport, Ky. The order includes the control machine, 10 Model-5C 110-volt switch machines, instrument housings, Type A and K relays, and new color-light dwarf signals.

THE CANADIAN NATIONAL has awarded a contract to the General Railway Signal Company covering materials and labor for the installation of a centralized traffic control system from Lutesville, N. B., to Truro, N. S. Two control machines located in Moncton will handle the 130.5 miles of road; the smaller machine covering 6.1 road miles between Lutesville and West End (Moncton), the larger machine covering 124.4 road miles between Moncton and Truro. The latter stretch is reputed to be the longest in the world to be placed under centralized traffic control from one machine. It comprises 98.6 miles of single track and 25.8 miles of double track, totaling 150.2 track miles. The longest individual control over two line wires is 124.4 miles. The code wires will be used also for telephone service. In addition to the control machines and code equipment, the project comprises 78 Model-5D dual-control switch machines, 246 Type SA searchlight signals, 116 Type W fixed signals, 11 spring switches, 61 welded-steel housings ranging in size from 6 ft. wide by 6 ft. long to 8 ft. wide by 8 ft. long, 50 Model 7 switch circuit controllers, relays, rectifiers, transformers of various types, and welded-steel instrument cases. Cases and housings are to be pre-wired in the factory.

MOTOR VEHICLES

THE SOUTHEASTERN GREYHOUND LINES, Lexington, Ky., has ordered five motor coaches from the a. c. f. Motors Company.

THE BURLINGTON TRANSPORTATION COMPANY, Chicago has ordered 16 air-conditioned motor coaches from the a. c. f. Motors Company.

Financial

ATLANTIC COAST LINE. — *Equipment Trust Certificates.*—Salomon Bros. & Hutzler, Dick & Merle-Smith and Stroud & Co. were awarded, on June 4, a $7,880,000 issue of equipment trust certificates of this road on a bid of 100.399 for 2⅛s, representing an interest cost to the road of approximately 2.049. The certificates, which mature serially in one to ten years, were immediately reoffered to the public at prices to yield from 0.40 per cent to 2.45 per cent, according to maturity.

BELLEFONTE CENTRAL.—*Abandonment*—This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon its Fairbrook branch, extending from State College, Pa., to Stover, 22.8 miles.

CHARLES CITY WESTERN.—*Notes and Extension of Maturity.*—This company has asked the Interstate Commerce Commission for authority to (1) issue a three per cent serial note in the amount of $80,000, the proceeds to be used to pay off the balance of a Reconstruction Finance Corporation loan; (2) to issue its four per cent promissory note for $20,000; (3) to extend the maturity date of $350,000 of its six per cent first mortgage bonds to July 1, 1951, and to reduce the interest rate to four per cent during the extended period; and (4) to pledge $200,000 of its first mortgage bonds as collateral security for its $80,000 note and to pledge up to $50,000 of its first mortgage bonds as collateral security for its $20,000 note.

CHESAPEAKE & OHIO.—*Equipment Trust Certificates.*—Halsey, Stuart & Co. and associates were awarded, on May 28, a $3,100,000 issue of equipment trust certificates of this road on a bid of 100.111 for 1⅝s, maturing serially June 15, 1942 to 1951, inclusive. The certificates were immediately re-offered publicly at prices to yield 0.25 to 1.95 per cent, according to maturity.

CHICAGO GREAT WESTERN. — *Receivership.* — Court control over the Chicago Great Western was severed on May 29 when the district court approved the final report of the trustees, Patrick H. Joyce and Luther M. Walter and ended the trusteeship.

CHICAGO UNION STATION.—*Bonds.*—This company has asked the Interstate Commerce Commission for authority to issue and sell $6,860,000 of guaranteed serial bonds to provide funds for the retirement of a like amount of its 3½ per cent guaranteed bonds now outstanding. The new bonds will be dated July 1, 1941, and will mature in 20 equal semiannual installments of $343,000 on January 1 and July 1 in each of the years from 1942 to 1951, inclusive. No interest rate has been determined upon as yet, but the petition states that it will depend upon the bids received.

At the same time the proprietary companies using the station, the Chicago, Burlington & Quincy; the Chicago, Milwaukee, St. Paul & Pacific; the Pennsylvania and its subsidiary, the Pittsburgh, Cincinnati, Chicago & St. Louis, have asked authority from the commission to guarantee the principal and interest on the bonds.

GULF COAST LINES.—*Annual Report.*—The 1940 annual report of this company (including all subsidiaries except the International-Great Northern) shows net deficit, after interest and other charges, of $524,789, an increase of $281,209 as compared with net deficit in 1939. Selected items from the consolidated income account follow:

	1940	Increase or Decrease Compared with 1939
Average mileage operated	1,757.35	−2.0
RAILWAY OPERATING REVENUES	$14,556,843	−$342,170
Maintenance of way	2,352,533	+55,542
Maintenance of equipment	2,168,693	−191,116
Transportation—rail	4,725,237	+191,233
TOTAL OPERATING EXPENSES	10,400,758	+81,482
Operating ratio	71.45	+2.19
NET REVENUE FROM OPERATIONS	4,156,085	−423,651
Railway tax accruals	887,664	+19,369
Railway operating income	3,268,421	−443,021
Net rents payable	1,063,762	−179,817
NET RAILWAY OPERATING INCOME	2,204,659	−263,204
Other income	112,028	−22,562
TOTAL INCOME	2,316,687	−285,766
Rent for leased roads and equipment	4,538	+3,559
Interest on funded debt	2,790,875	−8,275
TOTAL FIXED CHARGES	2,821,697	−5,855
NET DEFICIT	$524,789	+$281,209

INTERNATIONAL-GREAT NORTHERN.—*Annual Report.*—The 1940 annual report of this road shows net deficit of $2,810,183 after interest and other charges, a decrease of $159,899 as compared with net deficit in 1939. Selected items from the income account follow:

	1940	Increase or Decrease Compared with 1939
Average mileage operated	1,155	.....
RAILWAY OPERATING REVENUES	$11,349,852	−$66,962
Maintenance of way	1,878,414	+32,842
Maintenance of equipment	2,172,758	−95,340
Transportation—rail	4,836,660	−27,540
TOTAL OPERATING EXPENSES	9,880,166	−96,123
Operating ratio	87.05	−0.33
NET REVENUE FROM OPERATIONS	1,469,686	+29,161
Railway tax accruals	745,867	+26,906
Railway operating income	723,819	+2,255
Net rents	758,669	−167,365
NET RAILWAY OPERATING INCOME	34,851	+169,620
Other income	40,722	−7,304
TOTAL INCOME	5,872	+162,316
Interest on funded debt	2,783,884	−11,025
TOTAL FIXED CHARGES	2,803,219	+2,817
NET DEFICIT	$2,810,183	−$159,899

DEKALB & WESTERN.—*Deficit Status.*—Division 4 of the Interstate Commerce Commission has found that this company did not sustain a decrease in its net railway operating income while under private operation in the Federal control period and is not entitled to the benefits of section 204 of the Transportation Act of 1920, as amended January 7, 1941. As a result of the finding Division 4 has dismissed the carrier's claim.

LEHIGH VALLEY.—*New Directors.*—D. H. Brillhart, president of the Union Bank & Trust Co., Bethlehem, Pa., and G. A. Easly, mining engineer of New York, were elected directors of this road on May 28. Mr. Brillhart succeeds A. C. Dorrance, president of Campbell Soup Company, and Mr. Easly succeeds E. H. Burgess, general solicitor of the road, both resigned.

MISSOURI PACIFIC. — *Equipment Trust Certificates.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to assume liability for $2,895,000 of 2¼ per cent equipment trust certificates, maturing in 15 equal annual installments of $193,000 on June 16 in each of the years from 1942 to 1956, inclusive. The issue has been sold at 101.069 to Salomon Brothers & Hutzler, Dick & Merle-Smith, and Stroud & Co., Inc., making the average annual cost to the company approximately 2.1 per cent.

MORGAN & FENTRESS. *Deficit Status.*—Division 4 of the Interstate Commerce Commission has found that this company did not sustain a decrease in its net railway operating income while under private operation in the Federal control period and is not entitled to the benefits of section 204 of the Transportation Act of 1920, as amended January 7, 1941. As a result of the finding Division has dismissed the carrier's claim.

MOUNT HOOD.—*Deficit Status.*—Division 4 of the Interstate Commerce Commission has found that this company did not sustain a decrease in its net railway operating income while under private operation in the Federal control period and is not entitled to the benefits of section 204 of the Transportation Act of 1920, as amended January 7, 1941. As a result of the finding Division 4 has dismissed the carrier's claim.

NEW YORK, CHICAGO & ST. LOUIS.—*Equipment Trust Certificates.* — Halsey, Stuart & Co. and associates were awarded, on May 28, a $1,250,000 issue of equipment trust certificates of this road on a bid of 100.047 for 1¾s, maturing serially June 15, 1942 to 1951, inclusive. The certificates were immediately re-offered publicly at prices to yield 0.35 to 2.05 per cent, according to maturity.

NORTHERN PACIFIC. — *Purchase.* — This company has asked the Interstate Commerce Commission for authority to purchase the properties of the Minnesota & International, including control of the Big Fork & Northern. The purchase would be made through acquisition of the stock of the companies, and the Northern Pacific told the commission in its petition that $673,000 would be bid for the two properties at a foreclosure sale. The petition also pointed out that no change in the operation of the line is contemplated at this time.

ST. LOUIS SOUTHWESTERN OF TEXAS-FORT WORTH & DENVER CITY.—*Joint Operation.*—These companies have asked au-

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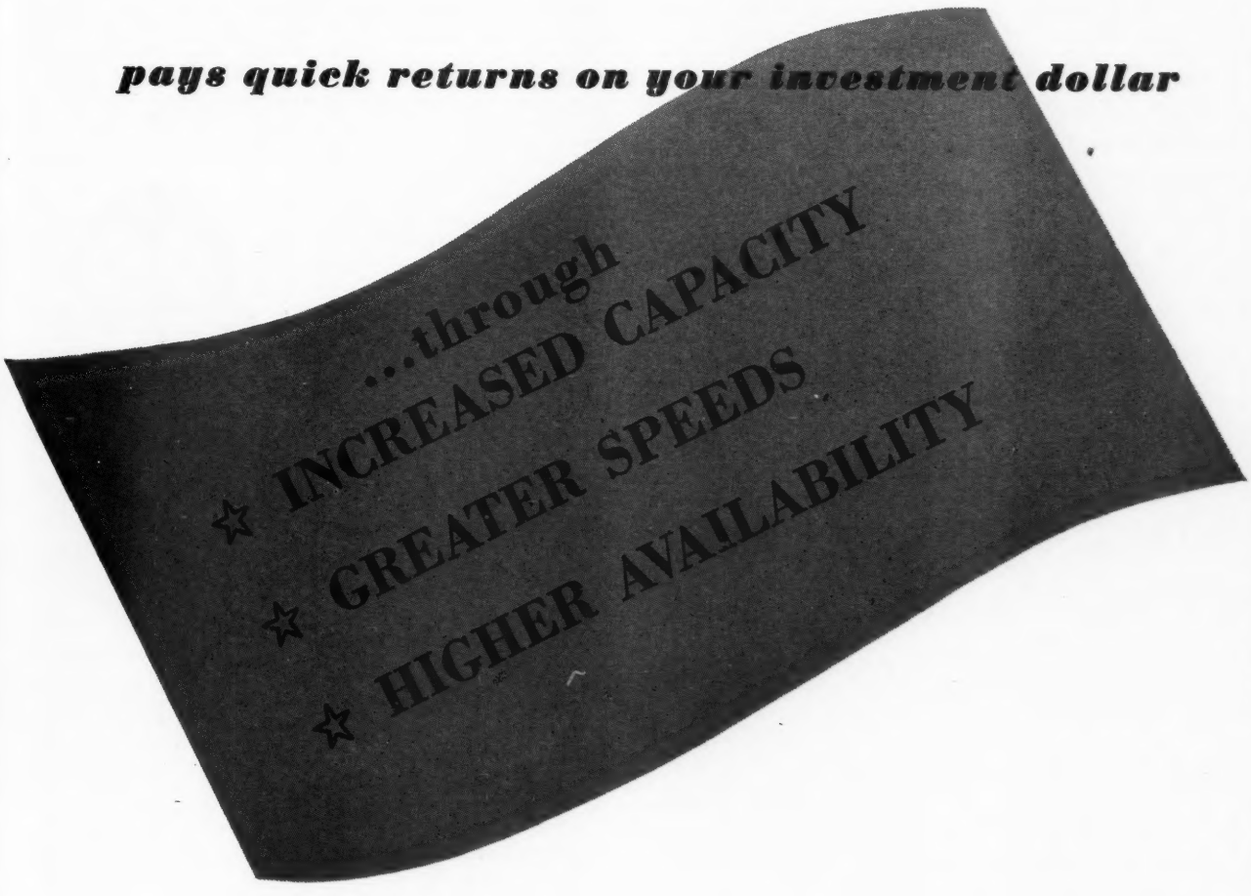
MODERN POWER

pays quick returns on your investment dollar



These three factors, which are of major importance in today's national emergency, have prompted many of the railroads to place orders with Lima for high-speed, heavy-duty passenger and freight locomotives of the type that have made the phrase "LIMA BUILT" a by-word for railroad economy and efficiency.

LIMA LOCOMOTIVE WORKS — LIMA LOCOMOTIVE WORKS INCORPORATED — *Incorporated,* LIMA, OHIO

thority from the Interstate Commerce Commission to operate over each other's lines in the city of Fort Worth, Tex.

SOUTHERN.—*Equipment Trust Certificates.*—This company has asked the Interstate Commerce Commission for authority to assume liability for $11,250,000 of equipment trust certificates, maturing in 10 equal annual installments of $1,125,000 on July 1 in each of the years from 1942 to 1951, inclusive. The proceeds will be used as part of the purchase price of new equipment costing a total of $12,517,000 and consisting of 3,400 box cars, 500 flat cars, 100 gondola cars, five Diesel-electric switch engines, and 25 baggage-express cars.

Harriman Ripley & Co. and associates were awarded this issue on June 3 on a bid of 100.179 for 2s, representing an interest cost to the road of 1.96. The first five maturities, constituting approximately one-half of the issue, were placed privately by the underwriters, while the remaining maturities were reoffered to the public at prices to yield from 1.80 to 2.35 per cent, according to maturity.

SOUTHERN PACIFIC.—*Equipment Trust Certificates.*—This company has asked the Interstate Commerce Commission for authority to assume liability for $14,625,000 of 2¼ per cent equipment trust certificates, maturing in 15 equal annual installments of $975,000 on June 1 in each of the years from 1942 to 1956, inclusive. The proceeds will be used as part of the purchase price of new equipment costing a total of $18,281,250 and consisting of 40 4-8-8-2, Class AC-10, oil burning locomotives with 22,000 gal. rectangular tenders; 10 4-8-4 semi-streamlined oil burning locomotives with 23,500 gal. rectangular tenders; 2,500 steel-sheathed, wood-lined box cars, and 50 tight bottom gondola cars.

The company's petition to the commission states that the issue has been sold to the First Boston Corporation, acting on behalf of the Mellon Securities Corporation, F. S. Moseley & Co., Kean, Taylor & Co., R. W. Pressprich & Co., Estabrook & Co., and the Illinois Company of Chicago at 99.568.

SUGAR LAND.—*Deficit Status.*—Division 4 of the Interstate Commerce Commission has found that this company did not sustain a decrease in its net railway operating income while under private operation in the Federal control period and is not entitled to the benefits of section 204 of the Transportation Act of 1920, as amended January 7, 1941. As a result of the finding Division 4 has dismissed the carrier's claim.

SUSQUEHANNA & NEW YORK.—*Abandonment.*—This company has asked the Interstate Commerce Commission for authority to abandon its line extending from Towanda, Pa., to Marsh Hill Junction, 46.5 miles, together with a 4.3 mile branch extending in a northerly direction from Marsh Hill Junction.

TEXAS & PACIFIC.—*Abandonment.*—This company has asked the Interstate Commerce Commission for authority to abandon operations over and dismantle a portion of its Eunice branch extending from Ville Platte, La., to Eunice, 15 miles.

TEXAS, OKLAHOMA & EASTERN.—*Stock.*—This company has asked the Interstate Commerce Commission for authority to issue 200,000 new shares of common stock with a $1 par value, 198,705 shares of which will be issued immediately in exchange share for share with a like amount of old capital stock now outstanding and the balance held in the company's treasury.

UNION PACIFIC.—*Abandonment by the Northern Pacific.*—The Union Pacific and the Northern Pacific, respectively, have asked the Interstate Commerce Commission for authority to abandon a line and the operation thereof, extending some 1.5 miles in Butte, Mont.

WESTERN MARYLAND.—*Bonds and Lease of the Greenbrier, Cheat & Elk.*—The Greenbrier, Cheat & Elk has been authorized by Division 4 of the Interstate Commerce Commission to issue $2,000,000 of first mortgage bonds, consisting of $500,000 of three per cent bonds, maturing serially in five equal annual installments of $100,000 each on May 15 in each of the years from 1942 to 1946, inclusive; $375,000 of 3½ per cent bonds, maturing serially in five equal annual installments of $75,000 each on May 15 in each of the years from 1947 to 1951, inclusive; and $1,125,000 of four per cent term bonds, maturing May 15, 1966, the proceeds, together with $241,300 in cash, to be used to redeem $2,235,000 of its outstanding five per cent bonds.

The bonds have been sold to a group composed of Dick & Merle-Smith and Salomon Brothers & Hutzler, both of New York, and Stroud & Co., Inc., of Philadelphia. The three and 3½ per cent serial bonds have been sold at 100 and the four per cent term bonds at 99.44, making the average annual cost of the proceeds of the term bonds approximately 4.06 per cent.

At the same time Division 4 has authorized the Western Maryland to acquire by lease the railroad and other property of its wholly-owned subsidiary, the Greenbrier, Cheat & Elk. The lease will run for a period of 25 years.

Average Prices of Stocks and Bonds

	June 3	Last week	Last year
Average price of 20 representative railway stocks..	28.46	28.36	21.33
Average price of 20 representative railway bonds..	64.56	64.29	51.54

Dividends Declared

Alabama Great Southern.—Ordinary, $3.00; 6 Per Cent Participating Preferred, $3.00, both payable June 27 to holders of record June 7.

Albany & Susquehanna.—$4.50, semi-annually, payable July 1 to holders of record June 14.

Atchison, Topeka & Santa Fe.—5 Per Cent Non-cumulative Preferred, $2.50, payable August 1 to holders of record June 27.

Beech Creek.—50¢, quarterly, payable July 1 to holders of record June 13.

Joliet & Chicago.—$1.75, quarterly, payable July 7 to holders of record June 25.

Cincinnati, New Orleans & Texas Pacific.—$3.00, payable June 25 to holders of record June 9.

Dayton & Michigan.—8 Per Cent Preferred, $1.00, quarterly, payable July 1 to holders of record June 14.

Mobile & Birmingham.—4 Per Cent Preferred, $2.00, semi-annually, payable July 1 to holders of record June 2.

Pennsylvania.—Irregular, $1.00, payable June 30 to holders of record June 7.

Pittsburgh, Ft. Wayne & Chicago.—$1.75, quarterly; Preferred, $1.75, quarterly, both payable July 1 to holders of record June 10.

Reading Company.—2nd Preferred, 50¢, quarterly, payable July 10 to holders of record June 19.

Railway Officers

EXECUTIVE

William Edward Navin, whose appointment as receiver of the Rutland, with headquarters at Rutland, Vt., was reported in the *Railway Age* of May 31, was born on May 30, 1887, at Center Rutland, Vt. Mr. Navin was graduated from Rutland high school in June, 1903, and on September 19, 1903, entered the service of the Rutland railroad, where he was employed in the general freight department until December 8, 1917, working on rates, compiling tariffs and doing general freight office work. He then enlisted in the United States Navy at the Great Lakes Naval Training Station, Illinois, later being transferred to Washington, D. C. Mr. Navin resumed service with the Rutland railroad as chief clerk in the loss and damage prevention department and was appointed supervisor, loss and damage prevention, on February 14, 1921. On January 1, 1929, he became general agent in the traffic and transportation departments and on August 1, 1938, he was appointed general freight agent, the position he held until his appointment by Federal Judge James P. Leamy as receiver of the road, effective June 1.

Moffett

William Edward Navin

FINANCIAL, LEGAL AND ACCOUNTING

John R. Mulick, claim agent on the Union Pacific at Denver, Colo., has been promoted to assistant general claim agent, with headquarters at Omaha, Neb.

James A. Gillen, Robert H. Bierma and **Hewitt Biaett** have been appointed commerce attorneys for the Chicago, Burlington & Quincy, with headquarters at Chicago. **Richard A. Cubbage** has been appointed contract attorney and **James I. Shields** has been appointed assistant attorney, Eastern district, also with headquarters at Chicago.

Thomas A. Graham, chief clerk to the general auditor of the Chicago, Rock Island

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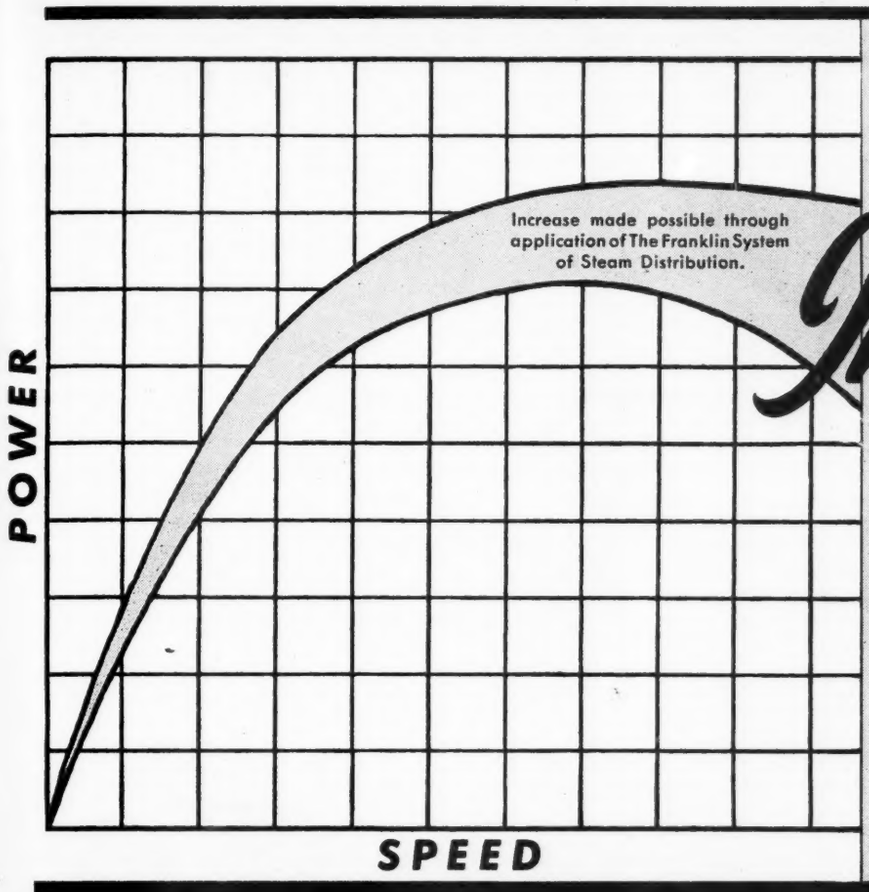

1/3 Increase

IN THE "TRAIN LOAD-SPEED" CAPACITY OF THE STEAM LOCOMOTIVE

THE
FRANKLIN SYSTEM OF Steam Distribution

Results in

★ MORE HORSEPOWER PER UNIT OF LOCOMOTIVE WEIGHT

★ MORE HORSEPOWER PER UNIT OF COAL AND WATER

★ MORE HORSEPOWER PER UNIT OF COST

It does this by releasing the latent power of the locomotive that was formerly locked up by the limitations of the piston valve, and the conventional valve gear.

FRANKLIN RAILWAY SUPPLY COMPANY, INC. NEW YORK CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

& Pacific, has been promoted to assistant general auditor with headquarters as before at Chicago, succeeding **A. C. Middleton,** whose promotion to general auditor was

Thomas A. Graham

reported in the *Railway Age* of May 31. Mr. Graham was born at Philadelphia, Pa., on May 11, 1893, and attended the London Collegiate Institute, London, Ont., for two years and the Westervelt Business College at London for six months. He entered railway service on December 3, 1914, as a clerk in the accounting department of the Rock Island at Chicago and with the exception of military service from September, 1917, to January, 1919, has remained continuously in the service of the Rock Island. On April 1, 1922, he was promoted to accountant, and on March 1, 1931, he was advanced to chief clerk to the general auditor, which position he held until his recent promotion, effective May 28.

A. C. Middleton, whose promotion to general auditor of the Chicago, Rock Island & Pacific, with headquarters at Chicago, was reported in the *Railway Age* of May 31, was born at Modale, Iowa, in 1878 and entered railroad service on January 1, 1898, with the Chicago & North Western as a car sealer at Missouri Valley, Ia. He worked in various capacities, as car checker, shop timekeeper, material clerk, and chief clerk to the storekeeper of the C. & N. W. at Belle Plaine, Iowa, and in 1905 he was made traveling auditor of the material and time accounts under the general storekeeper. In December, 1905, he went with the Rock Island as traveling time accountant under the auditor of disbursements. In June, 1906, he was made first accounts clerk in the office of the auditor disbursements. He was appointed district accountant at Cedar Rapids, Iowa, in January, 1908, and four years later was made chief clerk to the auditor of disbursements at Chicago. In February, 1921, he was appointed assistant auditor of disbursements and on January 1, 1928, was promoted to auditor disbursements. Mr. Middleton was advanced to assistant general auditor in March, 1931, the position he held until his recent promotion.

A. C. Middleton

OPERATING

J. R. Ivey has been appointed assistant superintendent of telegraph of the Atlantic Coast Line, with headquarters at Savannah, Ga.

G. R. Van Eaton, manager of the telegraph office of the Union Pacific at Las Vegas, Nev., has been promoted to assistant superintendent of telegraph, with headquarters at Salt Lake City, Utah.

R. F. Williams, chief dispatcher and terminal trainmaster on the Southern Pacific Lines in Texas and Louisiana at Hearne, Tex., has been promoted to trainmaster at Lafayette, La., and **M. D. Fleetwood** has been appointed chief dispatcher and terminal trainmaster at Hearne, succeeding Mr. Williams.

Francis C. McEntee, a conductor on the Utah division of the Union Pacific, has been appointed general superintendent of the Laramie, North Park & Western (controlled by the Union Pacific), with headquarters at Laramie, Wyo., succeeding **D. W. Adamson,** who retired on June 1 because of illness. Mr. McEntee was born at Laramie and entered railroad service in 1905 as a timekeeper on the Utah division of the Union Pacific, later serving as a brakeman and conductor.

TRAFFIC

O. W. Crapser, division passenger agent for the New York Central system at Chicago, retired on May 31.

Norton B. Fallas, city passenger agent on the Union Pacific at Portland, Ore., has been promoted to general agent, passenger department, at that point, succeeding **Burton Beck,** who retired on June 1.

Herbert L. Weir, advertising agent of the Pennsylvania, with headquarters at Philadelphia, Pa., retired from active duty on May 31 after almost 42 years of continuous service in the advertising department. Mr. Weir was born in Philadelphia 70 years ago and was educated in the public schools of that city. At the age of 17 he entered the journalistic field, serving as a reporter on the "Record" and on the "North American," first as a reporter, then on the copy desk and later as a political and editorial writer. Mr. Weir entered the service of the Pennsylvania on July 27, 1899, as a clerk in the advertising department, serving successively as assistant advertising agent and advertising agent. He was placed in charge of the Pittsburgh, Pa., office on June 16, 1920, and, after nine years, returned to the Philadelphia office, where he has been advertising agent since May 16, 1935.

Robert Neal Woodall, whose promotion to assistant freight traffic manager on the Southern, with headquarters at New Orleans, La., was reported in the *Railway Age* of May 17, was born at Lynchburg, Va., on August 11, 1904, and entered railway service on May 1, 1922, as a messenger boy in the office of the division freight agent of the Southern at Lynchburg. He was later promoted successively in that office to stenographer, tracing clerk, rate clerk and chief clerk, and on March 1, 1933, he was advanced to New England freight agent at Boston, Mass. On December 16, 1933, Mr. Woodall was appointed commercial agent at Lynchburg and on July 1, 1936, he was advanced to district freight and passenger agent at New York. On September 1, 1938, he was promoted to general eastern freight agent,

Robert Neal Woodall

with the same headquarters, and on May 1, 1939, he was appointed general agent, freight and passenger departments, at Pittsburgh, Pa., which position he held until his recent promotion.

E. D. Hanes, whose appointment as general coal freight agent of the Virginian at Norfolk, Va., was reported in the *Railway Age* of May 3, was born at Martinsburg, Mo., on August 27, 1879. Mr. Hanes was educated in the grammar and high schools of Kansas City, Mo., and the Kansas City and Chicago (Extension University) business colleges. He entered railroad service in the auditing department of the Kansas City, Memphis & Birmingham (St. Louis-San Francisco) at the age of 17 and later served as ticket agent and train dispatcher with the Kansas City-Independent Rapid Transit railroad, then becoming freight, ticket and station agent with the K. C. O. S. railway (Blair Line). He later went with the Kansas City, Nevada & Fort Smith (now Kansas City Southern), as station agent, telegraph operator and train dispatcher at Kansas City He served with the St. Joseph & Grand Island (Union Pacific) as ticket

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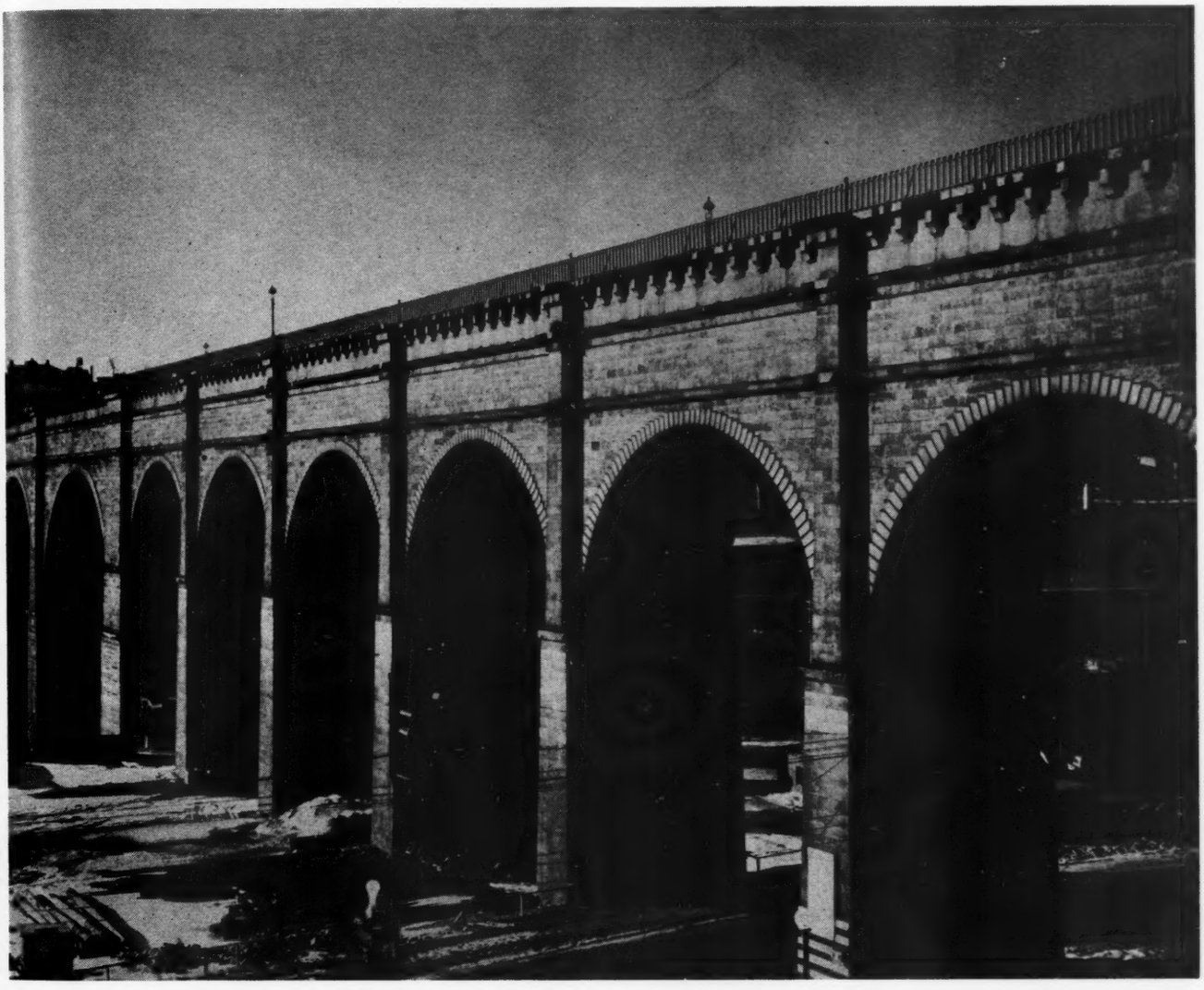
NO. 142 OF A SERIES OF FAMOUS ARCHES OF THE WORLD



HISTORIC HIGH BRIDGE

NEW YORK, N. Y.

One of New York's best known landmarks, High Bridge is an outstanding example of Roman architecture in the United States. Originally it consisted of 15 arch spans of granite having a total length of 1,197 ft. over abutments. *** In 1927 four of the eight 80-ft. arches over the River were replaced by a steel arch span by order of the War Department; part of a modernization plan for providing a deep, navigable channel around Manhattan Island.

* * * * *

Like this bridge, the Security Sectional Arch has been modernized . . . over the past 32 years . . . to keep abreast of the progress of modern locomotive power. Today, with a minimum number of shapes, it is standard on American railroads.

There's More to SECURITY ARCHES *Than Just Brick*

HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists

AMERICAN ARCH CO.
INCORPORATED
60 EAST 42nd STREET, NEW YORK, N. Y.

Locomotive Combustion Specialists

agent at Hastings, Neb., agent at Beattie and Hanover, Kan., and as joint general agent of that road and the Missouri Pacific at Seneca and Hiawatha, Kan. Mr. Hanes entered the service of the Virginian in 1912 as division claim agent at Princeton, W. Va., transferring to the operating

E. D. Hanes

department in 1913 as trainmaster of the New River division in charge of branches, with offices at Elmore, Pemberton and Oak Hill, W. Va. He was appointed superintendent coal terminals on August 28, 1917, serving on committee on the building of the Virginian's No. 2 coal pier. Mr. Hanes became superintendent of the New River division in 1927, continuing as superintendent coal terminals. In March, 1931, he was appointed supervisor of coal traffic, the position he held until his recent appointment as general coal freight agent.

PURCHASES AND STORES

John S. Fair, Jr., assistant to the purchasing agent of the Pennsylvania, has been promoted to assistant purchasing agent, with headquarters as before at Philadelphia.

A. W. Hix, assistant to the chief purchases and stores officer of the Chesapeake & Ohio, the New York, Chicago & St. Louis (Nickel Plate) and the Pere Marquette, has been appointed assistant general purchasing agent, with headquarters as before at Cleveland, Ohio, and **H. W. Brewer** has been appointed assistant purchasing agent of all three roads, with headquarters at Cleveland.

MECHANICAL

C. F. Deno, division master mechanic on the Canadian Pacific at Winnipeg, Man., has been promoted to master mechanic of the Manitoba district, with the same headquarters, succeeding **W. J. Renix,** who retired on May 31.

B. V. Johnson, assistant master mechanic on the Los Angeles division of the Union Pacific, has been promoted to maintenance supervisor—Diesel motive power, a newly created position, with headquarters at Omaha, Neb. Mr. Johnson will have general supervision over the maintenance of Diesel switching locomotives at Omaha.

ENGINEERING AND SIGNALING

Anthony Francis Dorley, principal assistant engineer on the Missouri Pacific, with headquarters at St. Louis, Mo., has retired.

Arthur O. Ridgway, whose retirement on May 1 as chief engineer of the Denver & Rio Grande Western, was announced in the *Railway Age* of April 19, has been appointed engineering consultant to the trustees, with headquarters as before at Denver, Colo.

OBITUARY

Lyman W. Putnam, retired general eastern agent of the Terminal Railroad Association of St. Louis, died on May 14 at St. Louis, Mo.

Mitchell C. Markham, who retired in 1928 as assistant to the vice-president in charge of traffic of the Missouri Pacific, with headquarters at St. Louis, Mo., died at his home in Chicago on May 30. Mr. Markham served with the Illinois Central from 1875 until 1903 and in 1906 became assistant to the vice-president in charge of traffic of the Missouri Pacific, remaining in that position until his retirement.

Carl S. Jefferson, general solicitor of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Chicago, died on June 2 after a prolonged illness. Mr. Jefferson was born at Madison, Wis., on August 31, 1876, and graduated from the law school of the University of Wisconsin in 1896. Two years later he became a law clerk in the offices of the Milwaukee at Chicago, being advanced to attorney in 1900. In 1910 he was promoted to assistant general solicitor. During the World War, Mr. Jefferson served as a judge advocate in the United States army, then re-entering the Milwaukee's service as assistant general solicitor. He was promoted to general attorney in 1922, and on January 1, 1931, he was elected general solicitor, the position he held until his death.

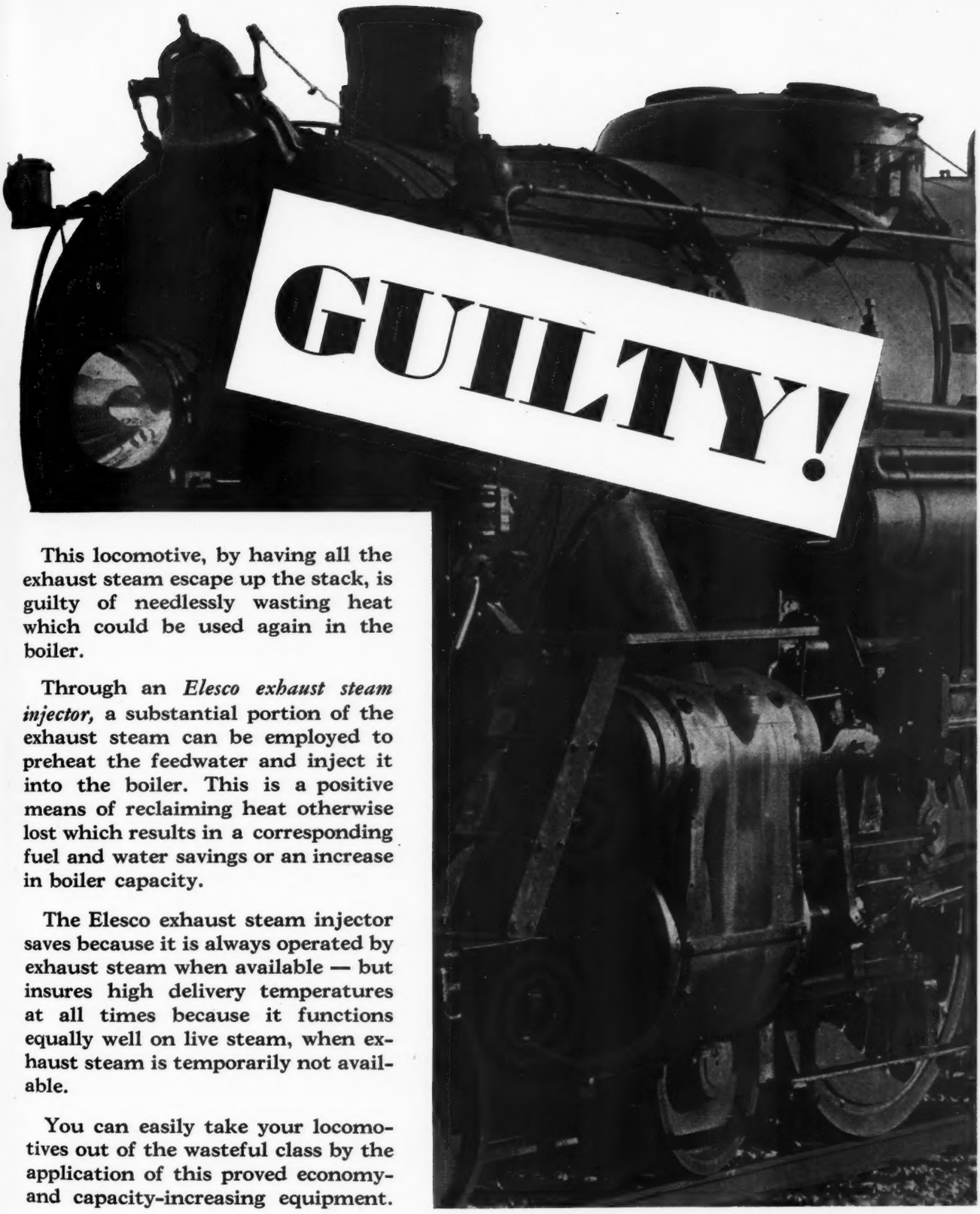
Harry E. Wolcott, former superintendent of the Philadelphia Terminal division of the Pennsylvania, died on May 29 at his home in Merion, Pa., at the age of 59, after a lingering illness. Mr. Wolcott was born in Bristolville, Ohio, on May 21, 1882, and entered the service of the Pennsylvania on July 20, 1899, on the Erie and Ashtabula division as a telegrapher, and, in succession, served as extra agent, train dispatcher, chief car clerk and later was appointed transportation inspector in the office of the general superintendent at Chicago. He was appointed trainmaster of the Eastern division on March 1, 1920, and was later transferred to the Baltimore division. On February 16, 1931, he was promoted to superintendent of the Schuylkill division at Sunbury, Pa., and on January 1, 1932, was transferred to the Williamsport division. Mr. Wolcott became superintendent of the Philadelphia Terminal division on November 1, 1934, and since June 1, 1940, had been on leave of absence on account of his health.

Robert H. Ford, retired chief engineer of the Chicago, Rock Island & Pacific, whose death on May 27 was reported in the *Railway Age* of May 31, was born at St. Albans, Vt., on September 8, 1869, and was educated in Norwich University, Northfield, Vt., graduating in 1892. He entered railroad service in the same year with the Central Vermont, with which road he served for 13 years as a roadmaster and in other capacities on construction and maintenance. In 1906, Mr. Ford left this company to go with the Missouri Pacific as an assistant engineer, later being appointed maintenance of way inspector. In 1907, he was promoted to principal assistant engineer, and in 1909 he was further advanced to assistant to the chief engineer maintenance of way. Resigning from the Missouri Pacific in 1911, Mr. Ford joined the Hodges-Downey Construction Company, Birmingham, Ala., general contractors, as chief engineer. In 1913, he left this company to go with the Rock Island as a special engineer, being appointed engineer track elevation in the following year, in charge especially of the large program of grade separation in Chicago. In 1919, Mr. Ford was promoted to principal assistant engineer, and in 1924 he was further advanced to assistant chief engineer. Mr. Ford was appointed chief engineer of the Rock Island on April 1, 1937, holding that position until his retirement. During his career, Mr. Ford had given much time to the broader aspects of transportation engineering, especially in relation to the effect on the railways of the development of the system of inland waterways in the Mississippi Valley. Mr. Ford was active in the affairs of the American Railway Engineering Association for many years, and served as its president and as chairman of the Engineering division of the Association of American Railroads in 1935-36. He had also served as chairman of various committees of the A. R. E. A., including the Com-

Robert H. Ford

mittee on Co-operative Relations with Universities and Colleges. Mr. Ford was a member of the board of trustees of Norwich University for a number of years, and that institution conferred upon him the honorary degree of Doctor of Engineering in 1939.

Table of Revenues and Expenses begins on next left-hand page



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REVENUES AND EXPENSES OF RAILWAYS

MONTH OF APRIL AND FOUR MONTHS OF CALENDAR YEAR 1941

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1941	Net railway operating income 1940
Akron, Canton & Youngstown	April	171	$227,468	$27	$238,061	$27,630	$23,862	$13,704	$64,498	$139,574	58.6	$98,487	$73,694	$56,213	$24,424
	4 mos.	171	912,856	132	953,998	106,768	91,059	55,385	264,557	557,321	58.4	396,677	302,262	241,125	137,767
Alton	April	959	1,061,879	230,399	1,510,231	204,875	251,390	48,973	593,724	1,173,247	77.7	336,984	231,291	54,121	—115,857
	4 mos.	959	4,182,575	940,755	5,959,526	638,478	959,607	182,075	2,399,114	4,468,484	75.0	1,491,042	1,073,380	351,439	—188,872
Atchison, Topeka & Santa Fe System	April	13,430	13,317,895	1,649,578	16,378,347	2,546,802	3,431,222	492,501	5,579,851	12,429,004	75.9	3,949,343	2,252,525	2,337,057	805,296
	4 mos.	13,431	48,042,176	6,538,130	59,671,058	7,962,788	13,250,380	1,908,590	21,408,218	46,039,917	77.2	13,631,141	7,439,757	7,635,478	2,215,099
Atlanta & West Point	April	93	137,881	30,291	196,119	20,225	29,454	8,810	75,263	144,746	73.8	51,373	33,132	15,510	—8,501
	4 mos.	93	529,269	122,116	748,552	71,779	108,135	34,915	288,526	547,900	73.2	200,652	128,510	60,391	—10,564
Western of Alabama	April	133	129,964	31,181	183,641	27,226	38,213	8,377	65,263	148,953	81.1	34,688	17,364	16,558	8,344
	4 mos.	133	511,069	124,955	714,468	95,333	133,520	33,049	261,966	563,476	78.9	150,992	78,451	70,252	24,328
Atlanta, Birmingham & Coast	April	639	294,015	22,148	339,732	51,015	60,462	26,105	136,250	284,637	83.8	55,094	30,503	—3,769	—42,710
	4 mos.	639	1,146,899	175,400	1,408,802	212,338	227,286	98,950	562,840	1,171,234	83.1	237,568	139,840	13,460	—87,068
Atlantic Coast Line	April	5,097	4,322,982	1,310,448	6,180,797	480,886	1,001,015	161,436	2,043,987	3,927,705	63.5	2,253,092	1,503,092	1,282,103	61,832
	4 mos.	5,098	16,455,542	5,302,833	23,829,101	1,825,597	3,723,286	695,610	8,192,558	15,468,261	64.9	8,360,840	5,810,840	4,902,925	1,543,041
Charleston & Western Carolina	April	343	244,642	1,707	252,586	28,404	36,348	9,368	75,968	156,372	61.9	96,214	61,214	60,057	46,914
	4 mos.	343	1,034,173	6,066	1,061,926	104,582	139,892	37,275	320,015	624,546	58.8	437,380	297,380	284,363	138,621
Baltimore & Ohio	April	6,370	12,712,970	1,100,287	14,748,374	1,503,246	4,145,740	427,153	5,319,244	12,004,932	81.4	2,743,442	1,726,218	1,296,101	1,712,879
	4 mos.	6,381	57,357,193	4,019,369	64,927,281	6,105,948	15,563,739	1,633,075	22,195,218	47,833,686	73.7	17,093,595	13,059,453	11,612,773	6,576,605
Staten Island Rapid Transit	April	24	67,597	67,509	146,350	15,112	22,011	1,311	75,895	126,469	86.4	19,881	—5,204	—11,756	—25,006
	4 mos.	24	255,233	262,256	550,848	53,531	87,604	4,570	318,089	510,103	92.6	40,745	—60,585	—95,292	—109,152
Bangor & Aroostook	April	603	567,814	19,021	606,373	82,779	90,308	5,613	137,972	341,606	56.3	264,767	189,422	189,245	183,393
	4 mos.	603	2,241,755	79,784	2,392,933	330,440	376,298	20,996	577,453	1,400,590	58.5	992,343	706,624	702,843	664,042
Bessemer & Lake Erie	April	216	1,333,262	532	1,345,526	139,042	348,849	12,665	232,133	770,658	57.3	574,868	397,024	462,422	98,587
	4 mos.	220	4,298,228	2,742	4,346,336	506,574	1,361,374	48,504	838,928	2,895,935	66.6	1,450,401	939,840	1,269,765	286,976
Boston & Maine	April	1,906	3,503,863	555,116	4,554,465	497,689	626,345	61,093	1,637,567	2,982,828	65.5	1,571,637	1,122,881	813,545	369,706
	4 mos.	1,906	13,309,811	2,461,194	17,754,772	2,085,202	2,451,287	269,592	6,697,370	12,154,698	68.5	5,600,074	3,898,269	2,835,726	1,684,448
Burlington, Rock Island	April	255	68,506	19,537	95,796	20,988	13,961	4,473	42,385	92,385	96.4	3,411	—6,028	—10,070	—19,635
	4 mos.	255	253,685	73,496	359,574	66,425	60,111	18,101	175,307	360,164	100.2	—590	—38,046	—57,709	—46,702
Cambria & Indiana	April	37	7,832	.....	7,919	8,244	64,427	406	5,555	85,193	1075.81	—77,274	—83,031	—60,613	63,066
	4 mos.	37	507,079	.....	507,519	24,564	247,016	1,655	52,711	350,136	68.99	157,383	12,135	249,555	379,802
Canadian Pacific Lines in Maine	April	234	434,955	14,914	463,636	29,044	66,987	6,353	161,816	270,072	58.3	193,564	180,419	152,847	87,407
	4 mos.	234	1,638,403	57,301	1,750,566	102,318	272,767	26,007	586,819	1,011,063	57.7	739,503	689,625	562,161	450,646
Canadian Pacific Lines in Vermont	April	91	87,775	5,529	102,791	14,023	19,894	2,115	68,237	107,508	104.6	—4,717	—11,266	—32,046	—22,209
	4 mos.	91	366,853	30,144	437,047	45,396	87,308	8,937	282,234	436,062	99.8	985	—25,761	—111,434	—141,648
Central of Georgia	April	1,863	1,421,833	177,145	1,777,518	190,165	303,358	55,657	646,036	1,282,107	72.1	495,411	374,388	364,974	23,611
	4 mos.	1,863	5,343,743	659,829	6,674,590	711,518	1,189,495	218,963	2,567,305	5,035,662	75.5	1,638,928	1,159,537	1,037,866	38,686
Central of New Jersey	April	711	2,415,689	342,296	2,976,209	298,958	743,573	44,241	1,238,404	2,415,245	81.2	560,964	90,642	—107,086	—61,212
	4 mos.	711	10,626,072	1,353,073	12,754,247	1,138,774	2,991,851	173,894	5,161,067	9,826,289	77.0	2,927,958	1,204,152	426,220	346,134
Central Vermont	April	422	577,280	27,736	645,685	66,795	86,839	10,914	233,665	416,973	64.6	228,712	204,295	152,629	69,096
	4 mos.	422	2,081,858	133,487	2,355,371	237,724	383,994	44,248	965,815	1,707,665	72.5	647,706	551,518	372,882	201,407
Chesapeake & Ohio	April	3,114	4,531,865	417,899	5,290,647	1,095,444	1,993,708	208,094	1,995,521	5,572,300	105.3	—281,653	—1,013,699	—987,436	3,004,369
	4 mos.	3,118	36,123,332	1,265,056	38,653,915	4,368,769	8,118,966	822,688	9,643,703	24,129,350	62.4	14,524,565	8,952,365	9,281,038	12,302,652
Chicago & Eastern Illinois	April	925	1,058,870	126,012	1,349,805	173,453	247,809	56,941	536,528	1,083,610	80.3	266,195	166,195	34,645	—86,006
	4 mos.	925	4,640,011	588,209	5,865,079	622,497	1,003,944	236,202	2,162,182	4,291,824	73.2	1,573,255	1,213,255	709,867	78,518
Chicago & Illinois Midland	April	131	129,323	609	137,798	12,281	26,904	20,212	58,411	135,106	98.0	2,692	—592	2,212	71,044
	4 mos.	131	1,361,234	2,490	1,424,592	149,563	244,405	89,347	367,793	926,354	65.0	498,238	324,175	306,816	307,344
Chicago & North Western	April	8,319	6,713,957	912,382	8,464,062	1,056,796	1,567,154	199,412	3,038,650	6,176,148	73.0	2,287,914	1,487,189	1,322,078	—37,429
	4 mos.	8,319	23,737,505	3,605,029	30,682,514	3,843,595	5,703,335	771,196	11,887,611	23,472,137	76.5	7,210,377	4,499,688	3,716,759	—745,860
Chicago, Burlington & Quincy	April	8,958	6,767,334	809,721	8,515,720	1,619,105	1,675,440	259,252	2,999,113	6,818,842	80.1	1,696,878	973,082	673,668	200,672
	4 mos.	8,958	26,734,413	3,025,074	33,323,788	3,703,753	5,772,758	976,890	11,909,660	23,553,599	70.7	9,770,189	6,928,080	5,704,911	2,637,055
Chicago Great Western	April	1,502	1,478,977	34,512	1,623,128	176,863	232,744	62,647	583,683	1,116,726	68.8	506,402	380,830	191,155	85,710
	4 mos.	1,502	5,835,162	206,108	6,474,755	708,009	933,952	248,702	2,380,914	4,502,282	69.5	1,972,473	1,484,330	743,968	163,449
Chicago, Indianapolis & Louisville	April	549	617,475	46,231	732,897	68,506	151,294	27,879	259,762	536,649	73.2	196,248	154,868	88,158	63,665
	4 mos.	549	2,854,454	158,709	3,290,157	271,927	624,926	107,503	1,141,435	2,276,626	69.2	1,013,531	827,475	468,941	288,785

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REVENUES AND EXPENSES OF RAILWAYS

MONTH OF APRIL AND FOUR MONTHS OF CALENDAR YEAR 1941—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1941	Net railway operating income 1940
Chicago, Milwaukee, St. Paul & Pacific	April	10,855	$8,348,141	$655,136	$10,045,774	$1,582,087	$1,796,873	$218,612	$3,466,499	$7,442,661	74.1	$2,603,113	$1,873,113	$1,666,237	$418,424
	4 mos.	10,855	32,983,851	2,772,986	39,385,892	3,956,061	6,960,574	881,584	14,135,373	27,509,721	69.8	11,876,171	8,980,171	7,753,988	3,314,443
Chicago, Rock Island & Pacific	April	7,944	6,152,386	780,782	7,495,344	820,072	1,279,769	272,835	2,563,904	5,251,137	70.1	2,244,207	1,754,132	1,362,848	243,420
	4 mos.	7,970	22,825,197	3,459,798	28,479,439	2,764,980	5,004,893	1,064,253	10,267,235	20,459,269	71.8	8,020,170	6,058,135	4,741,049	898,381
Chicago, St. Paul, Minneapolis & Omaha	April	1,629	1,170,816	114,502	1,393,541	170,563	263,728	38,396	631,919	1,167,593	83.8	225,948	114,687	8,135	—128,084
	4 mos.	1,629	4,769,468	495,333	5,659,157	620,622	1,009,301	155,596	2,667,561	4,716,603	83.3	942,554	490,292	50,456	—340,783
Clinchfield Railroad	April	308	690,233	8,172	705,147	48,810	124,892	19,906	131,861	342,876	48.6	362,271	285,603	300,767	335,023
	4 mos.	308	3,401,512	19,984	3,445,712	156,291	502,043	78,520	621,482	1,429,224	41.5	2,016,488	1,708,948	1,739,862	1,473,756
Colorado & Southern	April	786	490,172	44,322	585,569	72,083	119,787	12,737	217,541	447,993	76.5	137,576	68,877	39,739	—4,371
	4 mos.	786	1,990,593	159,475	2,353,931	203,508	457,331	52,146	856,070	1,677,828	71.3	676,103	402,940	301,070	32,322
Fort Worth & Denver City	April	804	341,604	46,569	464,521	69,510	84,649	18,788	164,144	367,749	79.2	96,772	60,658	26,338	28,416
	4 mos.	804	1,323,627	187,078	1,787,337	224,421	308,244	73,661	638,651	1,370,238	76.7	417,099	274,208	152,421	140,705
Colorado & Wyoming	April	42	75,596	.....	124,029	6,736	9,411	701	42,949	64,182	51.74	59,847	37,428	36,463	36,775
	4 mos.	42	334,934	.....	524,753	21,090	42,594	2,299	174,786	258,304	49.22	266,449	160,413	158,586	142,746
Columbus & Greenville	April	168	96,378	2,987	106,182	13,732	16,058	4,958	33,397	79,560	74.9	26,622	12,467	14,216	17,212
	4 mos.	168	373,791	11,513	409,053	52,820	61,012	19,302	139,255	327,833	80.1	81,220	36,319	40,879	24,363
Delaware & Hudson	April	849	1,977,866	60,814	2,125,981	233,475	460,447	40,747	808,386	1,627,017	76.5	498,964	343,980	285,625	315,830
	4 mos.	848	8,950,729	295,005	9,582,070	966,838	1,869,700	161,937	3,460,462	6,807,015	71.0	2,775,055	2,148,794	1,959,906	1,494,265
Delaware, Lackawanna & Western	April	995	3,515,248	513,467	4,513,895	247,093	886,120	110,594	1,930,220	3,313,766	73.4	1,200,129	757,729	709,841	437,367
	4 mos.	995	14,322,630	2,075,410	18,213,927	963,670	3,356,059	443,172	7,859,482	13,242,578	72.7	4,971,349	3,195,849	3,081,756	1,650,624
Denver & Rio Grande Western	April	2,547	1,784,860	110,415	1,996,623	369,286	578,893	88,520	707,612	1,835,318	91.9	161,305	—43,342	—64,432	—66,850
	4 mos.	2,548	7,321,950	467,380	8,178,613	888,155	2,421,929	329,293	2,995,670	6,990,621	85.5	1,187,992	370,787	293,994	—83,775
Denver & Salt Lake	April	232	70,819	4,388	84,871	27,442	41,055	2,577	43,714	124,153	146.3	—39,282	—63,879	—17,254	16,348
	4 mos.	232	595,400	21,477	654,512	87,529	170,040	10,624	231,931	538,334	82.2	116,178	16,481	201,826	323,475
Detroit & Mackinac	April	242	43,483	1,776	54,268	9,578	11,285	1,024	23,108	48,304	89.0	5,964	2,655	353	4,371
	4 mos.	242	152,528	9,911	199,655	32,423	46,403	3,817	96,649	191,715	96.0	7,940	—5,216	—17,025	—6,124
Detroit & Toledo Shore Line	April	50	262,026	.....	261,884	38,152	22,738	8,660	75,766	152,006	58.0	109,878	77,426	27,588	58,564
	4 mos.	50	1,502,358	.....	1,505,787	98,860	97,599	34,930	363,324	623,953	41.4	881,834	657,560	393,685	389,573
Detroit, Toledo & Ironton	April	472	501,720	218	557,237	59,390	89,213	12,982	130,413	310,904	55.8	246,333	174,461	127,443	171,441
	4 mos.	472	3,044,977	786	3,166,493	216,408	395,900	50,062	659,511	1,401,793	44.3	1,764,700	1,244,632	1,079,925	1,076,187
Duluth, Missabe & Iron Range	April	541	2,774,761	1,392	3,188,083	217,227	258,926	4,622	492,786	1,005,676	31.5	2,182,407	1,253,607	1,251,091	—372,876
	4 mos.	541	3,101,095	9,006	3,581,683	653,299	977,046	17,248	1,000,120	2,775,420	77.5	806,263	—1,131,587	—1,145,235	—1,996,493
Duluth, Winnipeg & Pacific	April	175	103,057	1,297	107,400	25,260	21,857	1,997	46,328	99,355	92.5	8,045	—945	—16,576	—10,835
	4 mos.	175	532,815	4,420	550,002	85,775	84,081	7,949	224,979	418,414	76.1	131,588	88,826	12,199	—19,129
Elgin, Joliet & Eastern	April	390	1,554,253	1	1,868,812	196,357	327,496	15,660	732,678	1,311,319	70.2	557,493	363,736	233,281	182,279
	4 mos.	390	7,921,602	11	9,069,559	641,489	1,292,028	60,870	3,079,393	5,235,060	57.7	3,834,499	2,716,493	2,101,155	1,081,100
Erie	April	2,257	6,932,390	355,882	7,835,238	606,088	1,488,374	184,010	2,922,535	5,466,681	69.8	2,368,557	1,697,426	1,366,203	543,975
	4 mos.	2,261	28,113,154	1,430,624	31,458,732	2,091,898	5,668,166	722,277	11,751,223	21,315,550	67.8	10,143,182	7,375,032	6,148,682	3,002,959
Florida East Coast	April	685	641,699	443,970	1,231,183	136,174	163,314	33,747	381,227	798,044	64.8	433,139	355,082	266,682	156,218
	4 mos.	685	2,533,303	2,217,724	5,329,538	464,839	645,601	134,911	1,676,711	3,265,848	61.3	2,063,690	1,749,572	1,402,928	1,187,166
Georgia Railroad	April	329	342,169	25,893	396,729	49,778	64,669	19,186	153,026	300,513	75.7	96,216	80,223	80,061	54,058
	4 mos.	329	1,378,636	82,268	1,567,612	158,096	256,154	75,654	614,855	1,160,865	74.1	406,747	343,687	350,770	173,800
Georgia & Florida	April	408	105,747	1,392	111,115	24,935	17,724	8,839	39,675	96,544	86.9	14,571	6,639	703	—12,260
	4 mos.	408	410,107	5,068	430,676	93,923	70,576	35,620	159,670	380,988	88.5	49,688	18,341	—8,160	—51,465
Grand Trunk Western	April	1,029	2,342,669	71,976	2,573,612	258,840	429,786	37,681	925,980	1,723,294	67.0	850,318	719,300	602,728	348,673
	4 mos.	1,029	9,073,442	285,582	9,986,859	948,813	1,666,147	151,520	3,706,950	6,745,874	67.6	3,240,985	2,712,319	2,239,975	1,261,670
Canadian National Lines in New England	April	172	112,032	1,661	144,373	34,950	23,566	2,639	72,932	147,833	102.4	—3,460	—19,603	—82,766	—75,822
	4 mos.	172	483,872	10,370	608,971	112,447	88,757	10,591	274,918	533,647	87.6	75,324	10,751	—184,285	—267,245
Great Northern	April	8,066	8,170,156	290,223	9,211,269	1,450,513	1,542,568	233,777	2,515,002	5,998,171	65.1	3,213,098	2,295,553	2,300,940	968,828
	4 mos.	8,066	24,630,120	1,254,623	28,067,184	3,915,466	6,201,103	771,119	9,715,239	21,595,203	76.9	6,471,981	3,421,064	3,110,783	1,713,602
Green Bay & Western	April	234	150,668	229	156,168	33,179	12,170	8,204	46,549	106,054	67.9	50,114	34,074	25,912	18,789
	4 mos.	234	609,269	1,157	628,301	98,544	65,243	34,569	198,938	418,410	66.5	209,891	148,063	110,674	87,136
Gulf & Ship Island	April	259	126,636	22,908	160,522	21,559	24,923	2,683	56,716	110,484	68.8	50,038	32,665	26,253	3,024
	4 mos.	259	470,207	53,833	565,463	79,618	78,064	11,902	229,654	418,704	74.0	146,759	77,589	30,654	—54,886

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF APRIL AND FOUR MONTHS OF CALENDAR YEAR 1941—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1941	Net railway operating income 1940
Gulf, Mobile & Northern	April	1,973	$1,792,340	$54,308	$1,921,299	$269,774	$301,351	$84,172	$553,413	$1,303,954	67.9	$617,345	$408,845	$294,058	$162,064
	4 mos.	1,973	6,753,047	180,667	7,214,631	948,227	1,104,582	339,492	2,121,007	4,886,730	67.7	2,327,901	1,515,401	1,110,540	436,925
Illinois Central	April	4,951	7,289,490	885,345	9,010,355	1,027,358	2,101,031	199,874	3,157,370	6,844,520	76.0	2,165,835	1,411,073	1,295,921	554,781
	4 mos.	4,950	30,798,335	3,728,308	37,267,042	3,586,386	7,698,649	863,479	12,891,155	26,397,729	70.8	10,869,313	7,848,933	7,938,318	4,179,785
Yazoo & Mississippi Valley	April	1,570	1,321,596	64,581	1,481,852	145,272	226,990	30,952	527,123	978,331	66.0	503,521	356,220	372,307	76,808
	4 mos.	1,599	4,593,919	238,560	5,165,167	509,573	794,634	133,622	2,060,772	3,685,516	71.4	1,479,651	897,012	724,441	457,791
Illinois Central System	April	6,521	8,611,086	949,926	10,492,207	1,172,630	2,328,021	230,826	3,684,493	7,822,851	74.6	2,669,356	1,765,173	1,677,140	641,502
	4 mos.	6,549	35,392,254	3,966,868	42,432,209	4,095,959	8,493,283	997,101	14,951,927	30,083,245	70.9	12,348,964	8,737,444	8,698,410	4,671,228
Illinois Terminal	April	477	414,018	63,644	525,429	55,757	75,756	18,074	167,927	336,498	64.04	188,931	134,053	110,837	63,372
	4 mos.	477	1,617,902	246,655	2,046,647	202,402	284,463	69,458	692,694	1,320,780	64.53	725,867	509,321	416,297	335,244
Kansas City Southern	April	879	1,241,148	51,704	1,430,243	133,792	220,981	55,453	399,502	873,711	61.0	556,532	446,532	354,950	237,360
	4 mos.	879	4,765,819	202,751	5,467,131	501,590	827,734	218,607	1,572,538	3,358,596	61.4	2,108,535	1,668,535	1,374,433	1,121,269
Kansas, Oklahoma & Gulf	April	328	181,843	369	184,594	17,821	9,826	8,796	44,203	91,642	49.6	92,952	68,236	52,421	53,608
	4 mos.	328	784,979	1,569	796,459	48,312	39,447	34,660	177,192	342,755	43.0	453,704	360,602	294,632	281,824
Lake Superior & Ishpeming	April	156	436,986	67	530,802	27,223	26,314	624	63,801	125,483	23.6	405,319	335,013	340,600	—20,599
	4 mos.	156	524,913	291	626,213	82,766	116,890	2,368	129,765	359,807	57.5	266,406	124,419	141,686	—216,071
Lehigh & Hudson River	April	96	145,456	.....	147,175	17,861	24,877	3,781	43,158	95,773	65.1	51,402	31,204	19,742	15,967
	4 mos.	96	641,271	.....	645,363	71,580	108,620	15,005	192,653	412,385	63.9	232,978	143,468	99,619	67,424
Lehigh & New England	April	190	291,468	.....	296,735	33,641	67,128	6,867	104,542	227,244	76.6	69,491	46,341	51,101	87,002
	4 mos.	190	1,360,147	.....	1,371,476	115,750	242,031	29,014	449,158	897,788	65.5	473,688	327,237	356,185	338,951
Lehigh Valley	April	1,269	3,590,660	157,867	4,003,722	244,117	707,739	107,754	1,608,008	2,792,688	69.8	1,211,034	951,755	699,827	267,804
	4 mos.	1,269	15,111,508	645,701	16,733,644	1,099,616	2,594,813	419,347	6,707,430	11,329,769	67.7	5,403,875	4,138,721	3,235,145	1,660,913
Louisiana & Arkansas	April	881	806,120	21,479	863,595	165,081	92,959	29,545	193,164	507,860	58.8	355,735	258,434	193,219	121,140
	4 mos.	881	2,994,625	78,152	3,194,576	506,304	374,183	115,376	772,649	1,879,096	58.8	1,315,480	956,574	706,400	511,322
Louisville & Nashville	April	4,865	6,424,209	646,066	7,688,590	932,721	1,735,267	175,904	2,585,244	5,709,819	74.3	1,978,771	1,069,999	1,091,569	1,378,706
	4 mos.	4,867	30,443,333	2,738,944	35,363,037	3,619,224	7,313,098	740,063	11,441,813	24,265,973	68.6	11,097,064	6,485,451	6,951,117	4,760,590
Maine Central	April	991	1,044,813	64,972	1,209,415	153,939	189,296	13,413	393,589	783,464	64.8	425,951	292,843	238,427	92,962
	4 mos.	991	4,247,128	274,525	4,878,851	569,595	773,163	46,846	1,670,357	3,195,156	65.5	1,683,695	1,247,485	972,838	677,967
Midland Valley	April	352	101,056	4	103,266	12,994	8,841	2,454	34,264	64,761	62.7	38,505	27,554	18,692	16,842
	4 mos.	352	422,473	16	429,744	41,906	39,016	9,631	122,839	239,082	55.6	190,662	147,484	112,100	123,133
Minneapolis & St. Louis	April	1,409	733,899	10,110	777,900	168,413	128,606	49,498	273,332	659,725	84.8	118,175	68,556	30,308	12,427
	4 mos.	1,409	2,886,396	45,591	3,065,211	478,108	543,580	198,368	1,111,017	2,481,594	81.0	583,617	409,807	259,622	159,125
Minneapolis, St. Paul & Sault Ste. Marie	April	4,271	2,451,204	60,795	2,723,219	479,180	431,735	63,859	984,761	2,055,766	75.5	667,453	416,620	332,724	60,200
	4 mos.	4,269	8,310,708	226,385	9,215,372	1,384,419	1,609,922	248,613	3,928,836	7,534,544	81.8	1,680,828	902,336	515,982	108,112
Duluth, South Shore & Atlantic	April	550	233,577	7,161	263,037	55,205	41,794	7,626	85,102	196,186	74.6	66,851	47,792	46,070	—1,102
	4 mos.	550	743,665	28,950	831,652	160,421	147,637	29,277	323,888	686,795	82.6	144,857	84,646	78,953	—23,812
Spokane International	April	152	69,717	474	77,085	26,913	7,051	2,239	22,413	62,241	80.7	14,844	9,316	5,863	—5,306
	4 mos.	152	224,377	2,123	255,468	60,256	25,924	8,864	85,434	195,346	76.5	60,122	39,382	25,491	11,420
Mississippi Central	April	158	92,936	3,928	98,105	20,200	12,370	7,612	21,362	65,918	67.2	32,187	24,302	19,016	518
	4 mos.	158	372,656	15,942	396,101	66,393	46,051	30,527	91,779	251,153	63.4	144,948	108,322	85,591	207
Missouri & Arkansas	April	365	104,389	1,363	112,494	31,579	12,234	7,566	36,900	93,406	83.0	19,088	14,606	3,428	2,125
	4 mos.	365	405,879	5,545	444,271	100,571	48,242	29,854	144,992	343,774	77.4	100,497	82,840	39,296	29,867
Missouri-Illinois	April	193	197,602	167	198,973	33,125	22,089	3,129	47,597	111,233	55.9	87,740	52,597	42,077	35,280
	4 mos.	193	760,210	756	766,651	97,192	81,260	12,679	191,635	399,994	52.2	366,657	244,905	199,055	176,318
Missouri-Kansas-Texas Lines	April	3,293	2,107,461	196,727	2,551,987	390,293	427,040	108,134	925,029	1,985,724	77.8	566,263	391,711	201,447	40,309
	4 mos.	3,293	8,070,491	815,849	9,808,599	1,304,098	1,582,055	428,779	3,658,355	7,472,258	76.2	2,336,341	1,667,750	922,833	251,762
Missouri Pacific	April	7,146	6,785,273	608,043	8,106,197	1,102,070	1,543,141	251,906	2,717,037	5,892,323	72.7	2,213,874	1,708,994	1,316,902	282,012
	4 mos.	7,146	27,175,990	2,374,780	32,281,764	4,021,762	5,766,210	993,093	11,178,121	23,000,602	71.2	9,281,162	7,289,781	5,741,874	2,063,553
Gulf Coast Lines	April	1,772	1,491,486	47,489	1,617,811	207,531	182,955	44,461	448,251	937,162	57.9	680,649	601,914	476,717	337,156
	4 mos.	1,772	5,521,295	172,053	5,987,581	799,759	730,137	174,118	1,727,365	3,643,439	60.9	2,344,142	2,032,116	1,482,963	1,432,676
International Great Northern	April	1,155	940,301	64,913	1,124,887	167,349	205,900	30,401	461,576	922,734	82.0	202,153	137,858	54,895	—45,552
	4 mos.	1,155	3,384,055	332,863	4,174,078	661,354	760,119	115,369	1,663,048	3,418,403	81.9	755,675	501,940	209,789	—184,573
Monongahela	April	172	70,827	548	73,294	31,876	14,659	549	43,603	96,092	131.1	—22,798	—53,939	—80,424	113,644
	4 mos.	172	1,400,151	2,150	1,410,395	128,455	111,354	1,980	351,332	606,627	43.0	803,768	668,611	389,438	522,605

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GENERAL MOTORS
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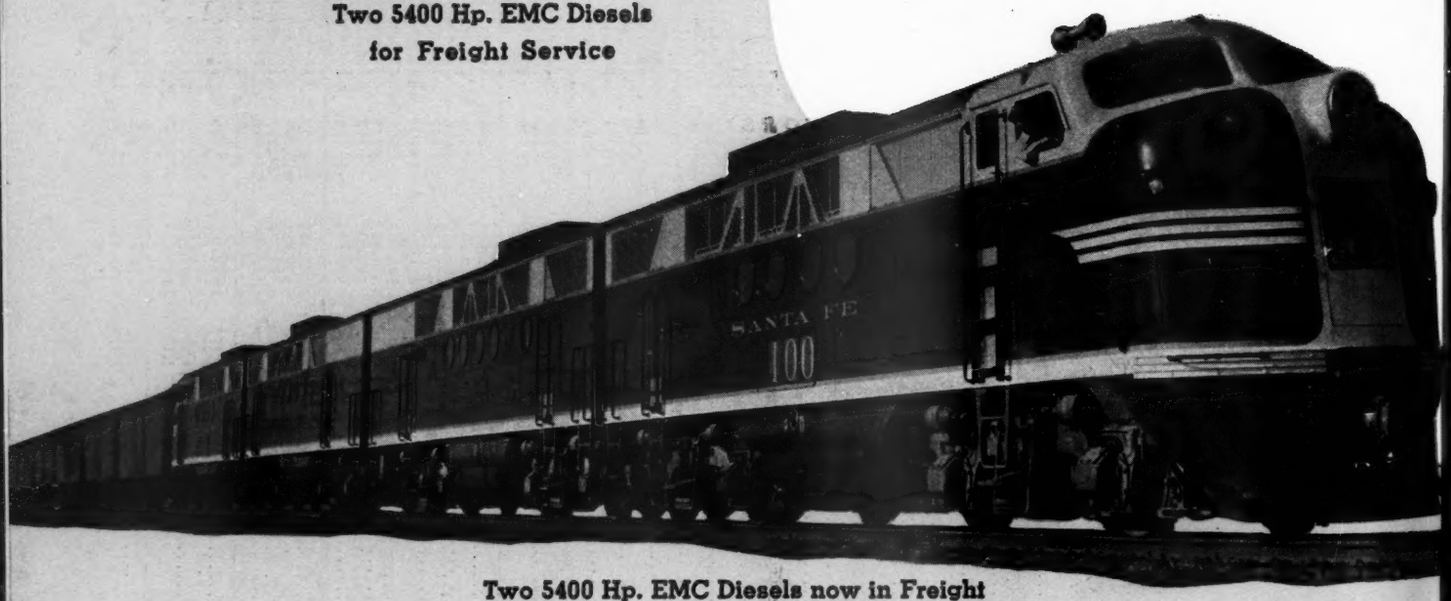
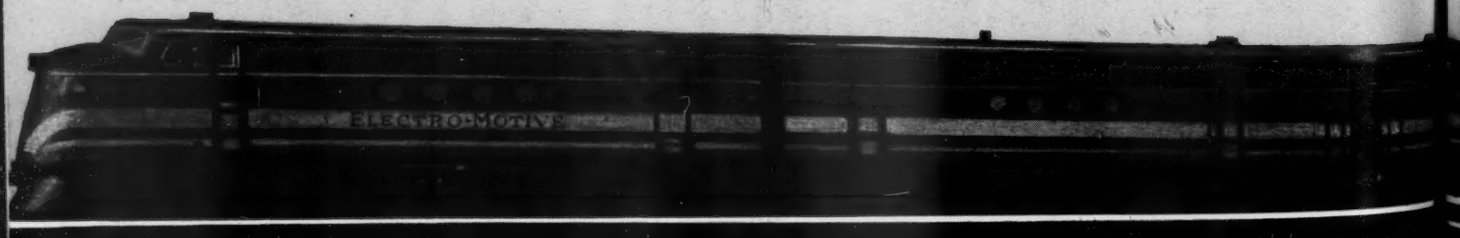
Two 5400 Hp. EMC Diesels for Freight Service



Two 5400 Hp. EMC Diesels now in Freight Service. Three more under construction



FREIGHT POWER

5400 Hp.
EMC Diesel for
Freight Service

New High Standards in Freight Service

EMC Diesel Freight Locomotives, in revenue service under all operating conditions, have conclusively proved their superiority over existing steam power in every phase of performance . . . POWER . . . SPEED . . . FLEXIBILITY . . . AVAILABILITY . . . ECONOMY.

NEW TOOLS—NEW STANDARDS—NEW ECONOMIES—all for the purpose of IMPROVING SERVICE and BUILDING BIGGER PROFITS.

ELECTRO-MOTIVE CORPORATION
SUBSIDIARY OF GENERAL MOTORS LA GRANGE, ILLINOIS, U. S. A.

Two 2700 Hp. EMC Diesels for
Freight and Passenger Service

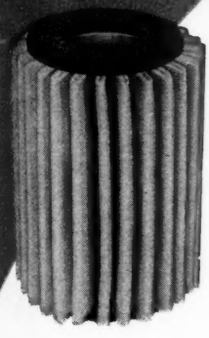
REVENUES AND EXPENSES OF RAILWAYS

MONTH OF APRIL AND FOUR MONTHS OF CALENDAR YEAR 1941—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of: Way and structures	Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income: 1941	1940
Montour	April	51	$15,450	.....	$15,584	$7,386	$50,451	$739	$15,096	$80,096	514.0	—$64,512	—$62,201	—$22,346	$61,137
	4 mos.	51	524,064	$75	529,993	34,269	166,482	2,920	157,032	386,276	72.9	143,717	49,819	168,450	249,998
Nashville, Chattanooga & St. Louis	April	1,111	1,354,860	110,980	1,610,769	180,665	257,127	65,063	570,717	1,131,897	70.3	478,872	310,649	267,959	175,631
	4 mos.	1,111	4,956,778	535,624	6,056,859	586,619	996,571	277,127	2,226,377	4,324,313	71.4	1,732,546	1,174,619	1,000,616	541,938
Nevada Northern	April	165	39,743	434	44,784	8,712	4,660	1,229	9,571	31,078	69.4	13,706	4,002	7,097	30,342
	4 mos.	165	199,012	2,275	219,251	35,591	16,117	4,906	42,811	125,191	57.1	94,060	50,279	59,219	92,108
New York Central	April	10,943	23,502,953	4,696,926	31,714,084	3,486,217	6,962,424	524,831	12,047,402	24,304,848	76.6	7,409,236	4,355,312	3,078,251	1,593,059
	4 mos.	10,943	100,491,433	19,927,228	133,770,806	13,051,677	28,056,714	2,097,794	49,474,284	97,875,860	73.2	35,894,946	22,323,285	17,408,282	9,591,304
Pittsburgh & Lake Erie	April	233	1,627,644	40,640	1,727,981	193,191	692,239	37,077	601,582	1,606,086	93.0	121,895	—91,278	294,655	124,172
	4 mos.	233	7,746,102	175,320	8,161,864	709,553	2,786,272	144,375	2,532,658	6,503,296	79.7	1,658,568	519,663	1,852,314	890,745
New York, Chicago & St. Louis	April	1,704	4,240,311	62,895	4,423,310	409,126	611,931	121,980	1,427,907	2,698,982	61.0	1,724,328	1,355,251	995,592	544,231
	4 mos.	1,704	17,103,820	248,573	17,801,707	1,470,599	2,414,882	477,088	5,726,330	10,586,068	59.5	7,215,639	5,692,026	4,363,107	2,359,746
New York, New Haven & Hartford	April	1,852	5,268,136	2,268,201	8,317,328	946,764	1,297,242	112,117	2,972,757	5,726,556	68.9	2,590,772	1,976,772	1,247,663	197,585
	4 mos.	1,851	19,676,563	8,999,301	31,667,883	3,439,640	4,998,269	412,979	11,717,279	22,165,281	70.0	9,502,602	7,189,102	4,425,360	1,715,597
New York Connecting	April	21	332,466	.....	346,826	41,623	10,904	.....	37,722	91,682	26.4	255,144	209,478	229,614	89,095
	4 mos.	21	1,355,855	.....	1,398,897	160,868	36,844	.....	127,994	331,369	23.7	1,067,528	886,014	1,014,416	424,903
New York, Ontario & Western	April	576	367,520	4,819	422,243	50,899	98,216	17,872	242,361	428,912	101.6	—6,669	—50,661	—91,896	—76,795
	4 mos.	576	1,561,078	20,261	1,760,995	192,275	386,564	65,459	991,884	1,719,847	97.7	41,148	—132,995	—259,415	—370,078
New York, Susquehanna & Western	April	144	244,732	26,016	282,324	21,065	16,774	2,137	106,873	156,303	55.4	126,021	96,727	56,193	39,276
	4 mos.	144	1,027,969	110,114	1,193,607	76,861	101,321	9,490	489,270	717,108	60.1	476,499	357,563	205,812	180,326
Norfolk & Western	April	2,191	3,847,805	317,818	4,435,905	889,076	1,760,689	147,895	1,542,603	4,543,769	102.4	—107,864	—746,179	—392,374	2,275,802
	4 mos.	2,191	31,681,702	1,222,252	33,866,186	3,691,731	7,878,787	581,846	7,516,241	20,490,024	60.5	13,376,162	7,227,746	8,418,175	10,435,355
Norfolk Southern	April	733	405,871	4,350	426,224	76,304	55,062	24,473	148,995	328,014	77.0	98,210	66,183	41,586	9,840
	4 mos.	733	1,546,222	17,147	1,619,133	303,638	217,169	97,283	575,233	1,284,910	79.4	334,223	206,559	127,237	—81,047
Northern Pacific	April	6,719	5,256,783	268,155	6,021,538	745,025	1,244,080	170,987	1,923,403	4,362,322	72.5	1,659,216	1,024,751	1,409,288	928,959
	4 mos.	6,719	18,845,155	1,160,835	21,856,975	2,631,642	4,647,454	635,396	7,852,167	16,854,452	77.1	5,002,523	2,520,423	3,893,667	2,425,205
Northwestern Pacific	April	352	225,282	5,837	250,055	67,766	45,224	2,415	111,390	249,269	99.7	786	—26,439	—41,430	—32,407
	4 mos.	352	821,517	60,008	957,807	256,290	170,348	10,603	505,922	1,008,686	105.3	—50,879	—135,769	—194,677	—281,769
Oklahoma City-Ada-Atoka	April	132	24,439	.....	24,930	4,712	831	781	8,174	16,019	64.3	8,911	6,628	2,912	1,097
	4 mo.	132	84,494	—5	86,064	16,811	5,449	2,784	32,685	63,310	73.6	22,754	13,180	—594	—5,992
Pennsylvania	April	10,246	31,480,867	7,008,865	42,472,767	4,717,843	8,207,962	691,418	15,868,154	30,847,920	72.6	11,624,847	6,615,477	6,025,764	5,832,542
	4 mos.	10,246	131,365,466	27,425,234	172,792,501	17,101,247	39,612,754	2,801,895	62,175,878	127,063,325	73.5	45,729,176	28,312,143	26,271,822	21,966,404
Long Island	April	379	737,552	1,225,112	2,080,566	200,049	346,842	8,709	950,987	1,548,557	74.4	532,009	230,354	39,918	—111,636
	4 mos.	379	2,791,528	4,687,414	7,905,146	825,162	1,351,851	32,772	3,800,856	6,164,046	78.0	1,741,100	801,071	98,971	—358,789
Pennsylvania-Reading Seashore Lines	April	411	328,291	142,315	499,848	86,537	112,787	8,958	323,970	547,913	109.6	—48,065	—135,034	—225,262	—258,504
	4 mos.	411	1,234,480	406,594	1,733,964	352,350	412,579	26,299	1,145,298	1,995,793	115.1	—261,829	—581,231	—889,650	—945,900
Pere Marquette	April	2,102	2,812,643	66,803	3,035,425	373,158	626,850	63,093	1,084,099	2,252,609	74.2	782,816	542,590	421,166	351,261
	4 mos.	2,102	11,532,920	293,933	12,384,808	1,406,045	2,374,685	250,690	4,358,704	8,794,166	71.0	3,590,642	2,514,550	2,089,563	1,448,497
Pittsburg & Shawmut	April	98	19,375	.....	19,702	12,864	16,835	1,686	10,304	45,713	232.0	—26,011	—28,163	—28,519	34,757
	4 mos.	98	270,093	.....	271,497	46,303	72,782	7,873	78,113	222,117	81.8	49,380	39,402	17,801	49,044
Pittsburgh & West Virginia	April	136	350,691	2	372,598	67,751	75,803	18,379	78,139	261,199	70.1	111,399	91,269	92,574	25,455
	4 mos.	136	1,489,553	70	1,573,969	260,626	285,984	72,993	323,356	1,026,530	65.2	547,439	442,164	471,980	328,781
Pittsburg, Shawmut & Northern	April	190	43,802	.....	44,218	16,297	13,504	1,181	23,394	61,466	139.0	—17,248	—22,242	—27,800	14,520
	4 mos.	190	426,947	.....	430,881	52,606	65,973	4,215	140,616	287,453	66.7	143,428	121,862	85,481	86,262
Reading	April	1,438	4,876,060	288,843	5,438,835	464,066	1,179,794	69,010	2,070,276	3,922,692	72.1	1,516,143	1,082,242	938,737	930,549
	4 mos.	1,439	21,667,634	1,175,959	23,902,624	1,717,593	4,832,778	279,813	8,664,467	16,069,450	67.2	7,833,174	5,458,254	4,957,346	3,787,502
Richmond, Fredericksburg & Potomac	April	118	568,143	453,523	1,175,663	108,825	171,171	9,417	369,350	723,139	61.5	452,524	304,547	253,947	29,003
	4 mos.	118	2,247,019	1,778,621	4,563,898	341,616	673,111	37,474	1,496,424	2,789,730	61.1	1,774,168	1,218,470	900,957	389,593
Rutland	April	407	221,412	20,716	296,586	31,350	60,334	11,003	151,012	263,927	89.0	32,659	16,819	18,172	27,511
	4 mos.	407	816,533	100,564	1,139,736	124,891	240,199	42,268	630,419	1,086,917	95.4	52,819	—21,473	—18,911	44,299
St. Louis-San Francisco	April	4,769	3,644,883	330,217	4,347,529	589,947	919,184	122,391	1,596,480	3,392,592	78.0	954,937	616,138	640,163	27,407
	4 mos.	4,769	14,697,736	1,299,409	17,416,785	2,149,503	3,583,467	483,326	6,278,912	13,191,208	75.7	4,225,577	2,919,089	3,124,860	289,828
St. Louis, San Francisco & Texas	April	159	145,835	672	151,567	23,115	13,832	7,937	53,247	102,424	67.6	49,143	40,810	15,620	—34,071
	4 mos.	159	517,727	4,185	541,627	88,456	57,614	32,106	215,159	413,063	76.3	128,564	95,772	—3,899	—141,862

Continued on next left-hand page

Here's where it's WISE to *"Strain at a Gnat"*



. . . The Compressor AIR INLET

ANY dirt that enters the compressor suction is harmful. It reduces performance integrity and shortens service life. Even fine dust will in time cause excessive wear, stuck rings, and clogged air passages. Therefore to exclude *all* dirt is vital ★ The only way of accomplishing this is to *filter* the intake air, not merely strain it. Our G-1 Suction Filter will do this effectively. It precipitates heavy particles of dirt and intercepts even fine dust suspended in the air. To thus keep compressors clean brings worthwhile operating and maintenance advantages ★ Many railroads have proved that when this filter is used instead of a small inferior strainer their compressors can be kept on the locomotive three to six times as long without overhauling. In the meantime, performance remains consistently reliable ★ Think of the economies YOU too can thus effect — elimination of costly delays due to faulty compressor operation or failure — extension of time between cleaning and renewal — reduction in number of replacements (more pronounced when standard Westinghouse repair parts are used exclusively).

The G-1 SUCTION FILTER comprises a removable element made of high grade close-textured felt of large area, radially pleated over reinforcing wire mesh, and encased in a detachable dirt chamber. It is compact; easy to handle, clean, and replace. Simple, economical maintenance is thus possible.

This Suction Filter will save many times its cost in reduced maintenance expense because it helps to eliminate faulty compressor operation and shortening of service life that results from destructive dirt. To "strain at a gnat" now will prevent necessity for "swallowing a camel" later!

WESTINGHOUSE AIR BRAKE COMPANY

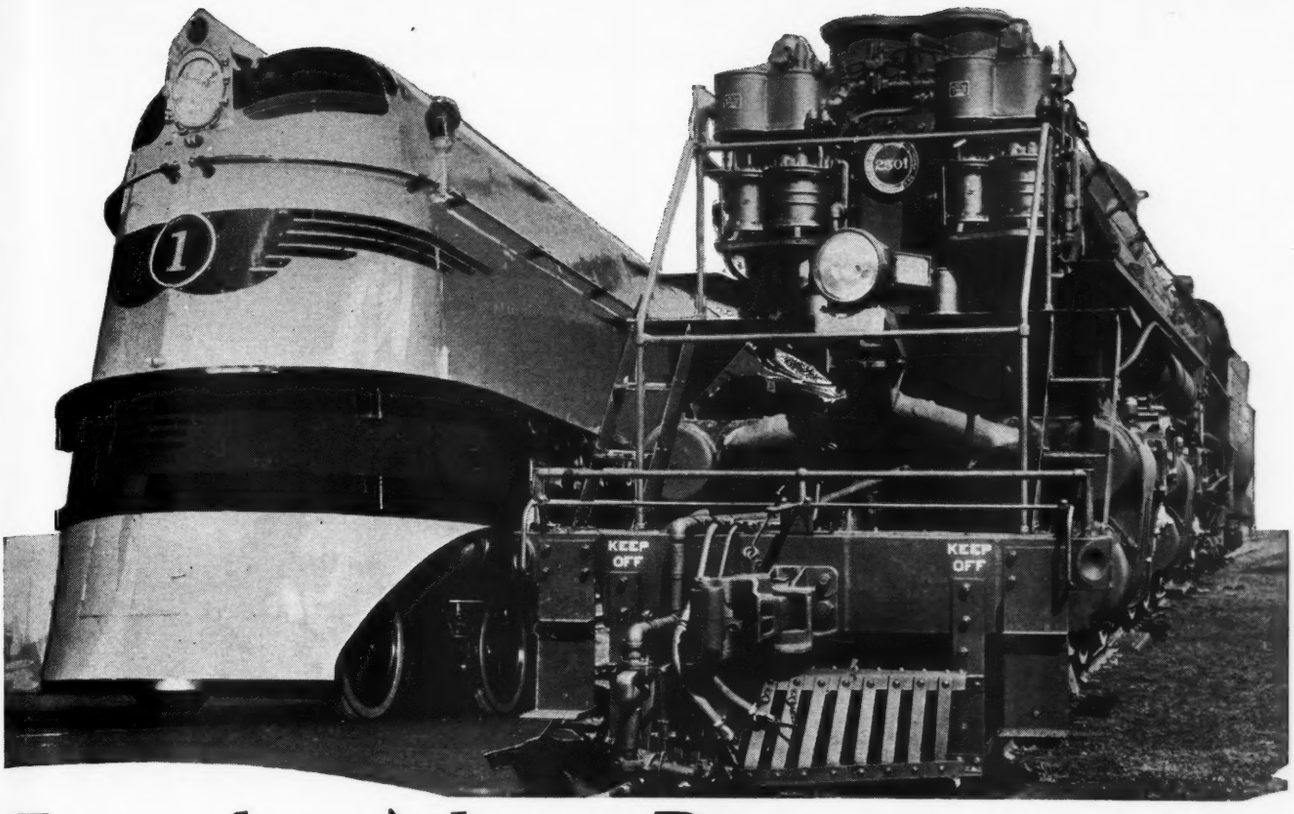
WILMERDING PENNSYLVANIA

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF APRIL AND FOUR MONTHS OF CALENDAR YEAR 1941—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1941	Net railway operating income 1940
St. Louis Southwestern Lines	April	1,617	$1,951,460	$47,577	$2,068,317	$215,867	$303,239	$85,815	$553,867	$1,239,580	59.9	$828,737	$714,464	$554,719	$44,690
	4 mos.	1,633	7,797,468	182,466	8,255,865	893,252	1,171,047	335,470	2,280,711	4,998,130	60.5	3,257,735	2,807,006	2,185,060	881,620
Seaboard Air Line	April	4,310	3,552,642	1,016,486	5,048,853	730,823	949,159	184,530	1,768,778	3,893,454	77.1	1,155,399	830,399	654,310	376,077
	4 mos.	4,310	14,810,304	4,502,356	21,109,874	2,637,673	3,677,023	763,004	7,310,407	15,455,880	73.2	5,653,994	4,203,994	3,457,152	2,096,114
Southern Railway	April	6,567	8,318,598	1,110,248	10,217,607	1,096,289	1,782,613	173,907	3,153,584	6,565,898	64.3	3,651,709	2,541,970	2,318,581	1,482,330
	4 mos.	6,567	34,510,755	3,857,479	41,276,337	4,414,080	6,712,293	701,756	13,204,939	26,413,767	64.0	14,862,570	10,737,683	9,543,057	5,760,524
Alabama Great Southern	April	315	697,183	101,899	860,075	88,003	167,823	15,315	242,689	541,038	62.9	319,037	197,884	176,423	131,254
	4 mos.	315	2,609,254	330,875	3,156,884	348,479	668,746	61,839	899,442	2,078,919	65.9	1,077,965	682,512	651,942	439,925
Cincinnati, New Orleans & Texas Pacific	April	337	1,523,210	148,523	1,760,906	179,530	346,410	32,798	425,212	1,041,366	59.1	719,540	460,931	441,210	382,984
	4 mos.	337	5,866,721	696,610	6,925,730	667,010	1,317,367	120,989	1,714,087	4,052,567	58.5	2,873,163	1,938,561	1,953,312	1,641,458
Georgia Southern & Florida	April	398	176,848	37,140	257,545	40,608	40,361	2,473	104,245	197,797	76.8	59,748	38,517	11,700	1,176
	4 mos.	398	885,852	271,918	1,355,980	155,253	182,031	9,999	483,887	873,048	64.4	482,932	352,104	228,821	69,839
New Orleans & Northeastern	April	204	340,731	70,763	437,562	45,679	35,959	8,443	109,054	215,456	49.2	222,106	157,983	129,370	35,473
	4 mos.	204	1,249,267	192,653	1,529,171	165,698	141,330	28,897	425,787	816,561	53.4	712,610	484,877	382,830	140,912
Southern Pacific	April	8,593	13,942,624	1,768,688	16,957,441	1,427,592	2,886,253	404,810	5,929,993	11,497,071	67.8	5,460,370	4,212,172	3,378,076	1,206,045
	4 mos.	8,600	52,057,725	7,271,734	64,086,560	5,556,813	10,745,152	1,482,310	22,838,475	43,969,675	68.6	20,116,885	15,279,354	12,157,501	3,245,215
Southern Pacific Steamship Lines	April	....	664,759	—170	703,753	33,315	76,511	10,634	522,501	657,623	93.4	46,130	17,195	15,245	—29,568
	4 mo.	....	2,979,589	54,669	3,190,380	139,308	410,463	58,793	2,195,382	2,862,668	89.7	327,712	216,035	203,923	151,136
Texas & New Orleans	April	4,417	3,869,216	336,192	4,544,581	604,156	751,957	131,003	1,379,393	3,072,587	67.6	1,471,994	1,157,385	889,678	348,147
	4 mos.	4,417	14,605,770	1,440,607	17,342,418	2,278,406	2,722,126	496,217	5,482,156	11,793,994	68.0	5,548,424	4,308,270	3,200,295	1,488,173
Spokane, Portland & Seattle	April	948	873,431	26,787	961,597	260,702	101,426	9,285	300,536	701,246	72.9	260,351	256,539	181,678	29,881
	4 mos.	948	3,096,200	101,214	3,417,370	627,848	352,601	40,300	1,161,154	2,296,927	67.2	1,120,443	896,933	600,354	241,074
Tennessee Central	April	286	195,184	3,534	213,123	39,931	35,582	6,891	75,010	167,587	78.6	45,536	33,883	26,081	16,965
	4 mos.	286	845,320	15,321	917,425	145,034	140,907	27,251	309,960	664,236	72.4	253,189	188,046	133,497	105,949
Texas & Pacific	April	1,887	1,928,325	202,141	2,354,697	250,781	465,181	75,906	703,580	1,615,116	68.6	739,581	570,007	481,627	334,604
	4 mos.	1,887	7,879,527	907,935	9,628,765	1,015,892	1,807,494	299,968	2,918,451	6,510,694	67.6	3,118,071	2,382,442	2,011,083	1,511,353
Texas Mexican	April	162	104,473	209	118,511	18,119	10,633	2,949	34,398	72,621	61.3	45,890	39,473	35,129	14,981
	4 mos.	162	349,888	1,569	405,335	60,800	45,173	12,546	130,985	277,163	68.4	128,172	103,114	89,536	10,506
Toledo, Peoria & Western	April	239	223,190	10	224,386	45,970	16,306	18,297	45,378	142,165	63.4	82,221	51,962	34,497	13,483
	4 mos.	239	860,656	13	870,808	147,681	64,498	73,353	184,394	519,983	59.7	350,825	200,744	132,507	107,892
Union Pacific System	April	9,892	12,787,818	1,343,165	15,371,812	1,978,519	3,633,988	494,195	4,980,319	11,850,329	77.1	3,521,483	1,776,140	1,172,635	1,091,597
	4 mos.	9,892	48,321,395	5,589,067	58,511,284	6,461,407	13,875,245	1,690,785	19,994,594	45,019,947	76.9	13,491,337	7,190,098	4,837,212	4,278,965
Utah	April	111	15,963	.....	15,992	7,834	17,863	430	7,228	37,376	233.7	—21,384	—24,560	—19,448	—3,863
	4 mos.	111	258,802	.....	259,312	34,891	90,752	1,709	72,473	216,088	83.3	43,224	4,545	12,770	23,791
Virginian	April	653	559,406	2,958	601,610	170,153	403,109	23,778	208,361	846,868	140.8	—245,258	—860,258	—846,099	810,872
	4 mos.	653	7,542,512	10,113	7,779,388	724,758	1,637,566	99,613	1,263,447	3,881,985	49.9	3,897,403	1,943,943	2,115,542	3,580,354
Wabash	April	2,409	3,797,414	209,888	4,312,669	608,157	667,351	150,336	1,563,206	3,150,145	73.0	1,162,524	920,916	567,679	57,167
	4 mos.	2,409	15,648,818	855,019	17,648,845	2,011,074	2,855,629	597,726	6,339,621	12,430,786	70.4	5,218,059	4,115,461	2,775,903	813,364
Ann Arbor	April	294	320,399	2,070	331,636	29,667	67,327	13,678	143,956	266,894	80.5	64,742	44,663	28,458	24,556
	4 mos.	294	1,402,014	6,595	1,439,949	101,460	283,044	53,434	608,911	1,095,262	76.1	344,687	241,106	181,406	80,933
Western Maryland	April	859	1,191,188	6,562	1,251,369	161,792	339,054	40,932	355,121	950,478	76.0	300,891	140,891	126,152	393,139
	4 mos.	859	6,504,289	26,043	6,763,156	708,717	1,473,452	165,579	1,715,401	4,276,250	63.2	2,486,906	1,826,906	1,829,422	1,817,929
Western Pacific	April	1,195	1,610,659	44,885	1,686,882	246,598	288,605	70,917	607,846	1,269,690	75.3	417,192	324,075	221,030	45,322
	4 mos.	1,195	5,741,450	203,827	6,063,520	722,837	1,097,937	260,247	2,325,013	4,636,196	76.5	1,427,324	1,039,956	645,199	49,466
Wheeling & Lake Erie	April	507	1,252,885	2	1,349,329	169,473	356,103	35,863	427,410	1,024,026	75.9	325,303	96,536	229,628	288,824
	4 mos.	507	5,654,303	26	5,905,432	631,619	1,367,832	150,900	1,673,229	3,964,203	67.1	1,941,229	840,274	1,336,000	1,255,537

Freight Operating Statistics appear on next left-hand page



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HUNT-SPILLER GUN IRON
Air Furnace

Freight Operating Statistics of Large Steam Railways—Selected

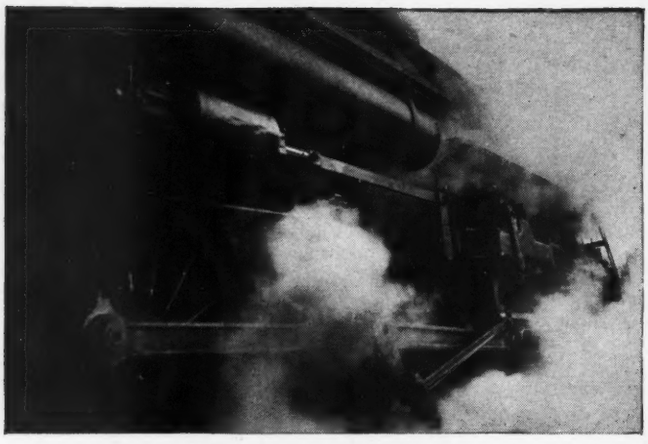
Region, road, and year		Miles of road operated	Train-miles	Locomotive-miles: Principal and helper	Locomotive-miles: Light	Car-miles: Loaded (*thousands*)	Car-miles: Per cent loaded	Ton-miles (*thousands*): Gross excluding locomotives and tenders	Ton-miles (*thousands*): Net revenue and non-revenue	Number of road locomotives on line: Serviceable: Not stored	Number of road locomotives on line: Serviceable: Stored	Number of road locomotives on line: Unserviceable	Number of road locomotives on line: Per cent unserviceable
New England Region:													
Boston & Albany	1941	362	166,209	173,278	12,284	3,661	68.1	209,088	78,895	56	3	28	32.2
	1940	362	134,149	139,627	10,832	2,907	63.2	166,577	55,056	54	1	31	36.0
Boston & Maine	1941	1,894	333,953	383,388	35,564	12,254	67.5	713,105	268,811	136	..	36	20.9
	1940	1,892	300,852	341,485	27,979	10,188	63.8	609,341	213,156	123	..	53	30.1
N. Y., New Hav. & Hartf.†	1941	1,824	418,345	526,292	33,764	15,436	68.4	848,948	325,525	199	1	59	24.1
	1940	1,844	353,955	444,011	32,243	12,045	63.4	680,294	239,669	186	13	51	21.0
Great Lakes Region:													
Delaware & Hudson	1941	849	290,024	342,567	42,084	10,727	63.7	712,626	332,037	127	37	83	33.6
	1940	846	243,715	332,776	37,868	8,222	60.9	532,653	244,433	131	40	76	30.8
Del., Lack. & Western	1941	983	389,894	458,783	63,597	15,146	69.0	892,475	365,394	131	5	72	34.6
	1940	983	383,032	431,121	58,011	13,044	65.3	777,910	299,590	140	6	57	28.1
Erie (incl. Chi. & Erie)‡	1941	2,257	813,890	866,067	55,056	36,171	67.9	2,223,332	925,251	250	8	165	39.0
	1940	2,268	667,901	704,031	40,762	28,613	64.9	1,745,235	659,131	225	32	172	40.1
Grand Trunk Western	1941	1,023	302,216	308,851	1,969	9,335	63.4	576,034	207,935	76	1	18	18.9
	1940	1,023	262,795	265,988	1,683	7,467	60.1	469,983	161,730	72	2	25	25.3
Lehigh Valley	1941	1,252	393,587	427,781	64,552	15,632	67.6	962,744	415,017	127	..	56	30.6
	1940	1,265	351,756	386,568	57,361	13,083	64.1	820,620	334,567	139	..	81	36.8
New York Central	1941	10,522	3,243,127	3,442,362	225,208	116,445	61.9	7,813,432	3,372,603	999	42	335	24.3
	1940	10,565	2,785,866	2,953,552	177,607	91,267	58.0	6,260,947	2,530,719	861	137	380	27.6
N. Y., Chicago & St. Louis	1941	1,672	632,003	638,200	8,310	23,837	66.5	1,452,412	580,864	179	7	12	6.1
	1940	1,672	556,356	566,271	7,139	19,107	61.4	1,181,167	425,751	176	3	19	9.6
Pere Marquette	1941	2,068	430,463	448,754	9,960	12,366	62.7	788,863	305,791	126	..	31	19.7
	1940	2,080	382,192	389,532	7,447	10,207	59.5	663,034	238,961	124	2	37	22.7
Pittsburgh & Lake Erie	1941	233	97,618	101,205	.....	4,030	62.3	335,072	188,224	36	2	22	36.7
	1940	233	72,790	76,380	.....	2,889	58.4	253,377	140,912	31	19	20	28.6
Wabash*	1941	2,397	679,643	693,373	13,972	22,885	66.4	1,370,143	513,522	148	6	108	41.2
	1940	2,397	601,751	616,310	12,738	18,586	63.2	1,116,225	384,970	150	10	109	40.5
Central Eastern Region:													
Baltimore & Ohio	1941	6,261	1,867,321	2,320,968	245,428	60,847	64.1	4,168,429	1,940,563	769	110	264	23.1
	1940	6,262	1,489,518	1,828,828	191,180	45,568	61.3	3,119,066	1,365,783	661	121	430	35.5
Central of New Jersey†	1941	680	208,923	236,689	44,459	6,576	61.0	461,227	226,729	87	2	58	39.5
	1940	679	174,626	196,630	35,261	5,225	58.8	375,866	177,147	80	7	68	43.9
Chicago & Eastern Illinois	1941	925	202,599	203,814	3,623	5,669	67.0	355,366	154,817	59	1	31	34.1
	1940	925	173,920	174,138	3,071	4,392	65.8	269,885	113,181	55	3	32	35.6
Elgin, Joliet & Eastern	1941	390	140,383	142,063	1,796	3,698	57.7	294,134	144,742	61	..	13	17.8
	1940	390	95,448	96,980	1,534	2,361	59.2	181,315	87,098	54	2	20	26.3
Long Island	1941	375	30,527	31,924	18,602	339	53.2	25,640	10,014	40	1	7	14.6
	1940	375	26,220	27,755	17,449	292	51.0	22,652	8,394	36	6	6	12.5
Pennsylvania System	1941	9,960	3,738,014	4,427,222	528,866	142,626	62.3	9,693,314	4,321,180	1,523	31	623	28.6
	1940	9,983	2,853,392	3,440,791	390,187	105,752	60.0	7,245,661	3,070,006	1,185	337	711	31.8
Reading	1941	1,431	519,673	577,366	72,797	16,445	63.4	1,186,421	595,089	242	2	112	31.5
	1940	1,443	416,688	461,265	52,277	12,142	59.1	895,624	425,422	209	13	144	39.3
Pocahontas Region:													
Chesapeake & Ohio	1941	3,043	964,386	1,033,682	47,946	45,916	58.6	3,779,618	2,078,600	389	43	69	13.8
	1940	3,044	839,947	887,982	39,374	37,251	57.3	3,079,453	1,680,548	380	62	81	15.5
Norfolk & Western	1941	2,169	814,753	869,914	54,649	36,891	58.6	3,024,721	1,595,431	307	10	22	6.5
	1940	2,169	649,307	682,364	41,980	28,856	58.9	2,338,009	1,233,445	286	31	35	9.9
Southern Region:													
Atlantic Coast Line	1941	5,072	796,912	817,695	11,729	18,695	63.6	1,114,243	416,056	303	1	41	11.9
	1940	5,075	679,323	689,694	9,554	15,681	62.3	928,987	324,595	274	11	39	12.0
Central of Georgia†	1941	1,831	298,035	301,514	4,973	7,116	73.9	401,418	167,348	93	..	28	23.1
	1940	1,831	262,270	263,740	3,845	5,583	69.4	325,208	128,973	101	..	18	15.1
Illinois Central (incl. Y. & M. V.)	1941	6,559	1,450,746	1,457,904	27,607	44,737	62.5	2,955,311	1,262,066	533	11	184	25.3
	1940	6,557	1,304,573	1,314,350	25,613	38,072	61.1	2,483,339	1,013,346	576	35	172	22.0
Louisville & Nashville	1941	4,856	1,349,622	1,461,159	38,789	34,416	60.2	2,470,734	1,198,805	351	38	65	14.3
	1940	4,862	1,085,172	1,159,161	30,622	26,634	61.0	1,849,191	871,612	336	45	121	24.1
Seaboard Air Line*	1941	4,298	725,885	758,492	5,131	18,227	65.2	1,098,440	428,672	252	2	48	15.9
	1940	4,301	624,502	643,967	4,786	16,034	63.5	967,442	362,309	259	3	45	14.7
Southern	1941	6,521	1,705,176	1,737,346	26,817	39,844	68.0	2,356,098	990,666	503	2	137	21.3
	1940	6,548	1,378,555	1,399,529	21,009	31,577	65.8	1,860,674	743,691	476	2	159	25.0
Northwestern Region:													
Chicago & North Western†	1941	8,316	903,826	937,262	17,821	28,123	64.4	1,773,185	689,010	299	33	249	42.9
	1940	8,324	802,805	829,332	14,636	23,528	61.6	1,458,217	541,144	274	101	253	40.3
Chicago Great Western	1941	1,447	281,066	283,121	6,096	8,690	64.7	535,587	197,879	71	..	15	17.4
	1940	1,447	255,354	256,574	5,987	7,327	60.5	464,316	161,712	69	..	20	22.5
Chi., Milw., St. P. & Pac.†	1941	10,847	1,355,848	1,412,983	50,686	42,886	64.5	2,741,267	1,145,672	429	47	141	22.9
	1940	10,874	1,187,198	1,231,791	41,354	34,396	62.3	2,205,236	886,774	403	106	154	23.2
Chi., St. P., Minn. & Omaha	1941	1,618	213,907	225,965	10,364	5,334	68.0	320,966	125,368	104	16	16	11.8
	1940	1,619	200,367	209,304	9,124	4,627	65.2	282,601	106,310	92	20	22	16.4
Great Northern	1941	7,970	937,434	932,535	29,059	31,224	63.0	2,043,842	806,861	331	52	134	25.9
	1940	7,973	760,331	755,463	25,533	25,234	61.3	1,688,846	660,832	309	81	139	26.3
Minneap., St. P. & S. St. M.†	1941	4,251	395,547	402,531	4,314	9,678	66.0	588,612	239,129	116	..	11	8.7
	1940	4,261	374,402	379,986	4,367	8,812	64.1	527,909	206,498	114	..	22	16.2
Northern Pacific	1941	6,422	712,779	755,506	46,868	26,426	70.8	1,577,721	682,760	324	42	80	17.9
	1940	6,423	673,323	712,970	41,166	22,476	63.2	1,431,710	582,322	335	24	80	18.2
Central Western Region:													
Alton	1941	915	225,017	241,511	1,153	5,244	63.0	336,670	134,336	66	5	8	10.1
	1940	914	201,471	211,726	994	4,170	59.2	274,783	95,650	59	14	10	12.0
Atch., Top. & S. Fe (incl. G. C. & S. F. & P. & S. F.)	1941	13,430	2,142,870	2,346,208	127,668	63,387	64.7	3,978,818	1,353,663	619	85	135	16.1
	1940	13,414	1,784,495	1,909,072	87,822	51,178	62.2	3,244,593	1,040,418	544	94	196	23.5
Chicago, Burl. & Quincy	1941	8,924	1,230,124	1,264,720	45,734	39,899	64.5	2,466,355	1,002,119	422	18	109	19.9
	1940	8,969	1,118,603	1,150,928	35,652	33,948	62.7	2,099,132	816,802	428	36	95	17.0
Chi., Rock I. & Pac.†	1941	7,911	1,205,549	1,222,164	7,884	32,271	61.9	1,975,146	715,313	361	20	130	25.4
	1940	7,881	1,117,476	1,130,783	8,590	27,524	59.3	1,736,178	595,618	313	56	176	32.3
Denver & Rio Gr. Western†	1941	2,547	296,559	332,264	41,816	8,816	68.7	558,456	247,408	120	28	32	17.8
	1940	2,554	241,408	266,663	27,887	6,970	65.5	443,656	182,501	126	43	18	9.6
Southern Pac.—Pac. Lines	1941	8,505	1,739,390	1,893,064	232,951	63,448	64.6	4,025,731	1,457,054	607	21	147	19.0
	1940	8,539	1,421,203	1,538,440	174,129	50,813	64.0	3,208,385	1,108,705	539	77	150	19.6
Union Pacific	1941	9,892	2,232,851	2,327,271	146,405	71,335	65.7	4,328,086	1,632,906	593	36	209	24.9
	1940	9,889	1,761,019	1,831,380	110,896	58,785	65.0	3,561,857	1,289,547	499	67	310	35.4
Southwestern Region:													
Mo.-Kansas-Texas Lines	1941	3,281	404,658	408,965	6,659	10,537	64.8	627,334	225,528	76	..	102	57.3
	1940	3,281	365,506	368,397	4,761	9,186	62.1	555,645	194,393	83	2	118	58.1
Missouri Pacific†	1941	7,109	1,246,337	1,285,323	23,984	38,041	63.6	2,459,676	973,758	394	22	80	16.1
	1940	7,120	1,070,404	1,094,669	22,344	31,896	62.5	2,020,558	762,225	371	48	91	17.8
Texas & Pacific	1941	1,882	284,826	284,907	2,138	9,490	63.1	593,269	206,792	68	31	91	47.9
	1940	1,932	269,632	269,632	1,942	8,768	59.7	566,695	193,387	68	21	102	53.4
St. Louis-San Francisco†	1941	4,735	801,620	816,269	14,409	18,458	63.3	1,182,174	475,405	274	19	29	9.0
	1940	4,784	717,035	723,192	8,396	15,030	60.7	954,339	364,601	272	43	40	11.3
St. Louis-San Fran. & Texas	1941	159	29,420	29,462	51	481	62.4	31,071	10,157	10	3	2	13.3
	1940	159	26,708	26,708	26	393	57.0	25,252	7,960	9	1	4	28.6
St. Louis Southw. Lines†	1941	1,600	334,796	337,635	4,455	10,685	66.9	622,448	234,063	86	12	21	17.6
	1940	1,673	287,589	288,427	3,709	8,749	64.3	512,001	180,959	78	19	14	12.6
Texas & New Orleans	1941	4,415	691,373	691,508	7,775	17,651	65.3	117,449	415,796	217	6	39	14.9
	1940	4,415	598,001	598,052	4,626	14,903	64.3	938,173	340,767	210	20	46	16.7

* Report of receivers.
† Report of trustee or trustees.
‡ Under trusteeship, Erie R. R. only.

Items for the Month of March, 1941, Compared with March, 1940

Region, road, and year	Number of freight cars on line: Home	Foreign	Total	Per cent unserviceable	Gross ton-miles per train-hour, excluding locomotives and tenders	Gross ton-miles per train-mile, excluding locomotives and tenders	Net ton-miles per train-mile	Net ton-miles per loaded car-mile	Net ton-miles per car-day	Car-miles per car-day	Net ton-miles per mile of road per day	Pounds of coal per 1,000 gross ton-miles, including locomotives and tenders	Locomotive miles per locomotive-day
New England Region:													
Boston & Albany 1941	667	5,894	6,561	0.8	22,123	1,277	482	21.6	402	27.4	7,030	149	74.3
1940	897	4,382	5,279	2.6	20,416	1,249	413	18.9	320	26.8	4,906	170	60.8
Boston & Maine....1941	4,195	9,738	13,933	2.8	29,870	2,143	808	21.9	638	43.1	4,578	102	84.2
1940	5,227	6,520	11,747	5.9	29,488	2,032	711	20.9	562	42.1	3,634	101	70.6
N. Y., New Hav. & Hartf.†.1941	5,926	17,664	23,590	4.3	29,288	2,062	791	21.1	472	32.7	5,757	113	78.2
1940	6,938	10,568	17,506	4.0	29,153	1,950	687	19.9	425	33.7	4,193	112	67.7
Great Lakes Region:													
Delaware & Hudson....1941	7,532	5,027	12,559	4.6	38,410	2,478	1,154	31.0	875	44.4	12,616	118	53.2
1940	7,900	3,334	11,234	4.0	33,494	2,198	1,008	29.7	685	37.8	9,320	122	51.7
Del., Lack. & Western....1941	9,458	8,203	17,661	3.6	38,499	2,307	944	24.1	666	40.0	11,991	138	84.7
1940	11,486	5,766	17,252	5.6	35,316	2,050	789	23.0	558	37.2	9,831	141	80.8
Erie (incl. Chi. & Erie)‡....1941	14,258	18,475	32,733	2.8	47,119	2,756	1,147	25.6	919	52.9	13,224	101	77.5
1940	16,913	13,008	29,921	4.2	45,144	2,633	995	23.0	724	48.5	9,375	103	62.5
Grand Trunk Western....1941	3,212	9,968	13,180	5.9	36,115	1,924	695	22.3	531	37.6	6,557	93	112.7
1940	4,151	6,227	10,378	7.8	35,326	1,793	617	21.7	499	38.3	5,100	99	93.8
Lehigh Valley 1941	8,701	11,673	20,374	1.8	46,781	2,490	1,073	26.5	667	37.2	10,693	116	95.3
1940	10,329	8,149	18,478	2.4	44,669	2,373	968	25.6	568	34.7	8,532	120	70.0
New York Central....1941	71,604	71,998	143,602	8.1	40,397	2,428	1,048	29.0	766	42.7	10,340	105	96.9
1940	87,994	51,688	139,682	12.4	38,563	2,264	915	27.7	588	36.6	7,727	106	82.7
N. Y., Chicago & St. Louis..1941	5,330	10,937	16,267	2.4	42,529	2,303	921	24.4	1,177	72.7	11,207	93	112.7
1940	6,729	8,063	14,792	2.9	40,057	2,127	767	22.3	932	68.1	8,214	96	99.7
Pere Marquette 1941	7,058	8,810	15,868	2.8	32,524	1,846	715	24.7	616	39.7	4,770	99	101.7
1940	8,863	7,142	16,005	3.3	30,325	1,741	617	23.4	482	34.6	3,706	100	85.1
Pittsburgh & Lake Erie....1941	7,427	7,540	14,967	12.7	44,275	3,447	1,937	46.7	410	14.1	26,059	97	61.2
1940	14,405	3,828	18,233	24.9	48,299	3,481	1,936	48.8	251	8.8	19,509	92	40.2
Wabash* 1941	8,904	12,825	21,729	1.3	40,546	2,036	763	22.4	777	52.2	6,911	120	90.8
1940	11,900	9,000	20,900	9.5	39,437	1,867	644	20.7	602	45.9	5,181	122	78.9
Central Eastern Region:													
Baltimore & Ohio....1941	45,710	35,334	81,044	4.0	30,229	2,274	1,059	31.9	766	37.5	9,998	152	76.6
1940	57,281	23,280	80,561	6.9	29,879	2,120	928	30.0	557	30.3	7,036	149	57.0
Central of New Jersey†....1941	5,873	13,472	19,345	4.5	28,161	2,333	1,147	34.5	381	18.1	10,756	138	80.6
1940	9,229	10,101	19,330	24.3	29,074	2,281	1,075	33.9	283	14.2	8,416	136	61.4
Chicago & Eastern Illinois....1941	2,515	3,793	6,308	5.1	31,817	1,778	775	27.3	802	43.9	5,399	132	77.0
1940	3,294	3,085	6,379	6.2	28,803	1,562	655	25.8	585	34.5	3,947	140	66.7
Elgin, Joliet & Eastern....1941	8,890	6,862	15,752	4.3	16,681	2,154	1,060	39.1	281	12.5	11,972	125	95.8
1940	8,309	3,998	12,307	5.2	16,903	1,947	935	36.9	225	10.3	7,204	131	60.0
Long Island 1941	89	4,234	4,323	0.3	6,394	867	339	29.5	81	5.1	861	322	50.1
1940	136	2,971	3,107	1.2	6,252	882	327	28.7	84	5.7	722	330	45.1
Pennsylvania System 1941	168,178	72,687	240,865	13.0	37,044	2,653	1,183	30.3	580	30.7	13,995	120	81.1
1940	197,291	56,203	253,494	14.6	38,456	2,584	1,095	29.0	396	22.7	9,920	119	61.1
Reading 1941	20,323	17,720	38,043	10.2	27,420	2,292	1,150	36.2	513	22.4	13,415	137	70.1
1940	24,756	12,375	37,131	18.7	27,887	2,159	1,025	35.0	363	17.5	9,510	140	50.2
Pocahontas Region:													
Chesapeake & Ohio....1941	41,173	13,340	54,513	2.0	57,367	3,968	2,182	45.3	1,226	46.2	22,035	78	76.7
1940	47,480	13,195	60,675	2.0	53,822	3,710	2,025	45.1	929	35.9	17,809	80	63.2
Norfolk & Western....1941	34,490	6,540	41,030	1.1	57,203	3,761	1,984	43.2	1,193	47.0	23,728	96	94.1
1940	35,071	5,111	40,182	3.7	55,660	3,641	1,921	42.7	921	36.6	18,344	96	72.4
Southern Region:													
Atlantic Coast Line....1941	12,325	11,069	23,394	10.0	24,562	1,402	523	22.3	571	40.4	2,646	118	84.0
1940	14,723	8,290	23,013	16.9	24,602	1,370	479	20.7	456	35.3	2,063	115	74.6
Central of Georgia†....1941	3,983	4,885	8,868	1.7	25,584	1,352	564	23.5	604	34.8	2,948	127	88.4
1940	4,842	2,754	7,596	2.1	24,622	1,247	495	23.1	548	34.2	2,272	126	79.1
Illinois Central (incl. Y. & M. V.) 1941	24,783	19,124	43,907	2.9	33,935	2,064	881	28.2	919	52.1	6,207	135	69.4
1940	30,120	13,926	44,046	3.2	31,747	1,929	787	26.6	742	45.6	4,985	136	59.7
Louisville & Nashville....1941	31,253	11,204	42,457	4.0	28,904	1,833	889	34.8	893	42.5	7,964	127	112.0
1940	36,517	9,226	45,743	11.1	27,163	1,708	805	32.7	581	29.1	5,783	137	81.7
Seaboard Air Line* 1941	10,588	9,613	20,201	2.7	26,270	1,540	601	23.5	675	44.0	3,217	132	91.1
1940	12,000	6,850	18,850	4.7	26,806	1,566	586	22.6	625	43.5	2,717	125	74.8
Southern 1941	22,942	24,136	47,078	7.5	23,388	1,394	586	24.9	682	40.4	4,901	150	93.3
1940	22,568	18,543	41,111	6.9	23,693	1,358	543	23.6	577	37.2	3,664	145	75.3
Northwestern Region:													
Chicago & North Western†...1941	28,790	22,644	51,434	6.4	31,046	2,006	779	24.5	428	27.1	2,673	126	56.6
1940	32,065	17,743	49,808	10.9	29,646	1,849	686	23.0	347	24.5	2,097	129	47.4
Chicago Great Western 1941	1,935	4,193	6,128	1.6	35,500	1,909	705	22.8	1,115	75.6	4,411	124	116.1
1940	2,183	2,956	5,139	2.2	34,594	1,820	634	22.1	998	74.7	3,605	128	101.4
Chi., Milw., St. P. & Pac.†...1941	36,009	21,402	57,411	2.8	33,423	2,032	849	26.7	628	36.4	3,407	122	82.6
1940	44,999	16,148	61,147	2.6	31,014	1,864	750	25.8	466	29.1	2,631	124	67.5
Chi., St. P., Minn. & Omaha.1941	2,078	5,948	8,026	5.5	20,610	1,511	590	23.5	502	31.4	2,499	118	60.8
1940	4,040	4,783	8,823	7.6	19,704	1,416	533	23.0	394	26.3	2,118	122	56.5
Great Northern 1941	30,834	10,215	41,049	5.5	35,378	2,188	864	25.8	627	38.5	3,266	112	63.9
1940	34,325	10,025	44,350	6.4	33,691	2,229	872	26.2	483	30.1	2,674	116	52.0
Minneap., St. P. & S. St. M.†.1941	10,988	4,423	15,411	4.0	25,956	1,491	606	24.7	488	29.9	1,815	109	106.8
1940	12,276	3,500	15,776	4.5	24,494	1,410	552	23.4	423	28.1	1,563	110	93.5
Northern Pacific 1941	26,054	6,382	32,436	6.4	37,465	2,226	963	25.9	668	36.6	3,430	136	63.4
1940	29,356	5,535	34,891	10.5	34,488	2,133	868	25.9	536	32.7	2,925	135	59.7
Central Western Region:													
Alton 1941	1,156	6,166	7,322	4.4	35,847	1,505	601	25.6	602	37.3	4,736	141	106.2
1940	1,542	5,505	7,047	5.1	34,412	1,372	478	22.9	438	32.3	3,376	135	86.6
Atch., Top. & S. Fe (incl. 1941	57,639	13,808	71,447	7.5	37,588	1,860	633	21.4	610	44.1	3,251	122	99.9
G. C. & S. F. & P. & S. F.).1940	63,738	9,546	73,284	13.7	37,049	1,822	584	20.3	457	36.2	2,502	122	81.1
Chicago, Burl. & Quincy....1941	24,113	18,534	42,647	4.7	35,562	2,014	818	25.1	746	46.0	3,622	115	81.3
1940	29,196	15,323	44,519	7.6	33,601	1,883	733	24.1	596	39.5	2,938	118	72.8
Chi., Rock I. & Pac.† 1941	16,207	13,653	29,860	3.7	32,222	1,642	595	22.2	778	56.7	2,917	118	82.4
1940	20,191	11,123	31,314	6.3	30,650	1,556	534	21.6	613	47.8	2,438	120	71.2
Denver & Rio Gr. Western†..1941	10,582	3,199	13,781	2.8	31,797	1,892	838	28.1	585	30.3	3,133	157	71.3
1940	12,126	2,767	14,893	3.4	31,034	1,844	759	26.2	408	23.8	2,305	159	53.8
Southern Pac.—Pac. Lines ..1941	27,693	27,384	55,077	3.6	37,828	2,328	842	23.0	861	58.1	5,526	100	93.4
1940	29,100	24,020	53,120	4.7	38,057	2,271	785	21.8	674	48.3	4,188	100	76.3
Union Pacific 1941	33,315	22,269	55,584	4.3	42,939	1,958	739	22.9	961	63.9	5,325	124	98.4
1940	37,977	18,158	56,135	14.3	44,601	2,034	736	21.9	746	52.3	4,207	122	73.9
Southwestern Region:													
Mo.-Kansas-Texas Lines 1941	5,066	3,524	8,590	9.5	31,357	1,551	558	21.4	833	60.1	2,217	92	80.6
1940	5,594	3,078	8,672	6.8	31,130	1,521	532	21.2	725	55.1	1,911	94	63.7
Missouri Pacific† 1941	14,752	22,501	37,253	2.6	36,393	1,986	786	25.6	863	53.0	4,419	121	91.5
1940	18,472	14,785	33,257	2.3	34,706	1,895	715	23.9	721	48.3	3,453	118	75.5
Texas & Pacific 1941	2,899	4,344	7,243	2.5	42,040	2,085	727	21.8	894	65.0	3,544	89	52.0
1940	3,343	4,118	7,461	1.5	39,995	2,103	718	22.1	810	61.6	3,229	88	50.2
St. Louis-San Francisco† 1941	13,358	7,269	20,627	2.4	30,159	1,484	597	25.8	747	45.8	3,239	128	88.0
1940	17,624	4,913	22,537	2.3	27,499	1,334	510	24.3	522	35.5	2,458	133	70.3
St. Louis-San Fran. & Texas.1941	....	437	437	1.8	22,999	1,058	346	21.1	805	61.1	2,061	131	64.1
1940	....	419	419	3.1	18,761	947	299	20.3	576	49.8	1,615	144	63.2
St. Louis Southw. Lines† ...1941	1,958	3,528	5,486	1.3	38,525	1,865	701	21.9	1,360	92.7	4,719	88	97.5
1940	2,517	2,729	5,246	3.3	36,540	1,781	629	20.7	1,075	80.9	3,489	86	87.6
Texas & New Orleans 1941	5,389	12,481	17,870	3.6	31,312	1,626	605	23.6	746	48.5	3,038	91	91.9
1940	6,135	10,819	16,954	5.0	30,272	1,579	574	22.9	644	43.8	2,490	88	75.3

Compiled by the Bureau of Statistics, Interstate Commerce Commission. Subject to revision.



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